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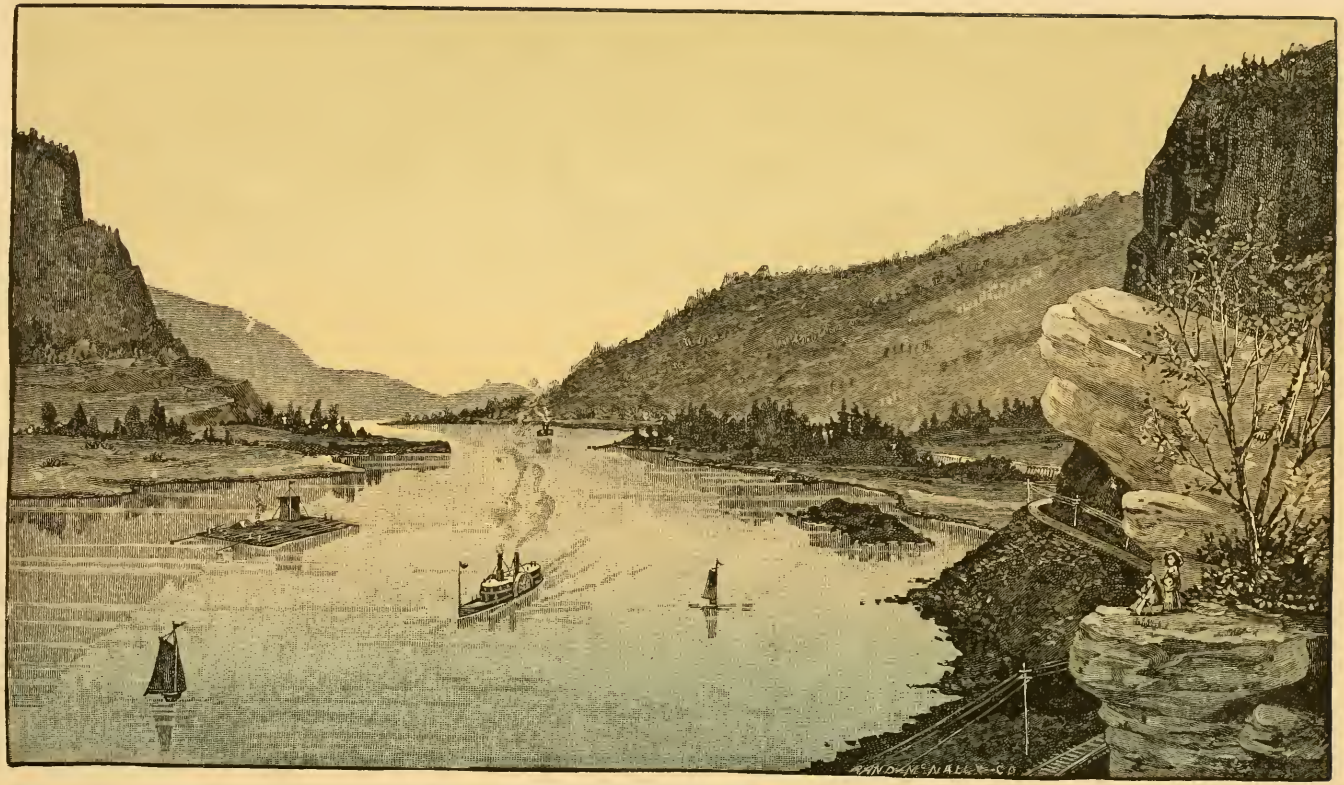

COLUMBIA RIVER, LOOKING EASTWARD FROM ROCK BLUFF.

Wonderland;

OR,

Alaska and the Inland Passage

BY

LIEUT. FREDERICK SCHWATKA.

WITH

A Description of the Country Traversed by the Northern Pacific Railroad,

BY

JOHN HYDE,

Author of "The Wonderland Route to the Pacific Coast," "Alice's Adventures in the New Wonderland," etc., etc.

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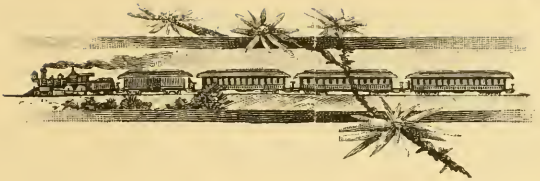


INTRODUCTORY.

"MULTI discurrent, et augebitur *stultitia*." Thus did one of the profoundest of modern thinkers parody the prediction of the Hebrew prophet who foretold the time when, with increased facilities for travel and intercommunication, there should come a great enlargement of the bounds of knowledge, and a corresponding amelioration of the condition of humanity.

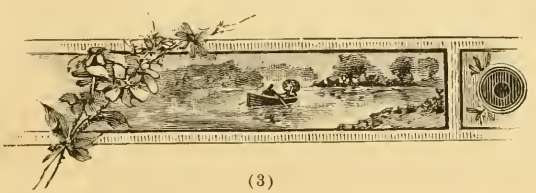
It would, however, be strange indeed, if the complex process of social evolution, even in its present stage, were not marked by some of the indications of a retrograde movement. The age in which we live has undoubtedly its peculiar follies and foibles, which are but thrown into relief by the qualities that more generally distinguish it.

But many are running to and fro, and knowledge is being increased. Nature is revealing herself to the traveler in new forms and aspects, and disclosing to his wondering gaze mysterious pages of her great book hitherto hidden from him.

And while extensive tracts of country, presenting physical features to which the entire known world furnishes no parallel, have been brought by railroad enterprise within reach alike of the curious sight-seer and the inquiring student, a vast region, of almost unexampled wealth-producing capabilities, has, by the same agency, been thrown open to that advancing tide of civilization which is rapidly overspreading the world.

Hence the traveler journeying to Wonderland—to that enchanted realm where the most extravagant creations of the fancy appear trivial and commonplace beside the more extraordinary works of Nature—sees also, in process of solution, some of the hitherto most perplexing problems of economics ; observes, as he can not do with like facility anywhere else in the world, the well-ordered plan upon which the bounty of Nature is distributed ; and witnesses the unlocking of vast storehouses of good, to supply the increasing needs of the human race.

It may be doubted whether the world affords another tour at once so delightful and so instructive as that which, beginning at the head of the Mississippi valley, and crossing the great wheat fields of Dakota and Eastern Washington, the stock ranges of Montana, and the gold and silver ribbed mountains of Montana and Idaho, embraces also the wonders of the Yellowstone National Park, and the incomparable scenery of the Columbia river, to crown all with the stupendous sights of that Great Land whose unique natural features have earned for it the well-deserved title of "Wonderland." No longer one of peril and hardship, but, on the contrary, one of absolute luxury, this tour has, within the last two years, attracted thousands of pilgrims from all parts of the civilized world. To them, as well as to all other lovers of the sublime and beautiful, and to the students of the mysteries of Nature in all lands, who may have the good fortune to visit the far Northwest in 1886, the following pages are respectfully inscribed.



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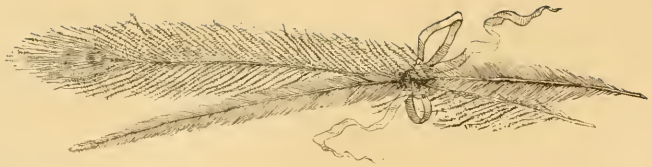

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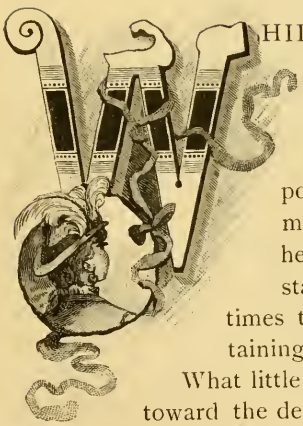
From the Great Lakes to Puget Sound.

"To the doorways of the West-Wind,
To the portals of the Sunset."



WHILE, in the old world, armies have been contending for the possession of narrow strips of territory, in kingdoms themselves smaller than many single American States, and venerable *savants* have been predicting the near approach of the time when the population of the world shall have outstripped the means of subsistence, there has arisen, between the headwaters of the Mississippi and the mouth of the stately Columbia, an imperial domain, more than three times the size of the German empire, and capable of sustaining upon its own soil one hundred millions of people.

What little has been done—for it is but little, comparatively—toward the development of its amazing resources, has called into existence, on its eastern border, two great and beautiful cities, which have sprung up side by side on the banks of the great Father of Waters.

It is there, at St. Paul and Minneapolis, that the traveler's journey to Wonderland may be said to begin. And what could be more fitting? for are they not wonders in themselves, presenting, as they do, the most astonishing picture of rapid expansion the world has ever seen?

But it is not their magnitude that excites the greatest surprise. If there is a single newspaper reader in ignorance of the fact that the State census of 1885 found them with a population of 240,597? or that the 23,994 buildings erected within their limits since the beginning of 1882, represent a frontage of over 100 miles and an expenditure of $69,895,390, or that their banking capital

considerably exceeds that of either San Francisco, New Orleans, Cincinnati or St. Louis, it is through no fault of the cities themselves. But the visitor may bring with him a just appreciation of their size and commercial importance, and yet have had no conception of their beauty, nor of the abounding evidences of public spirit and private enterprise that will confront him at every turn.

The position of St. Paul, at the head of navigation, and as the focus of the railway activity of the Northwest, commands for it an extensive wholesale trade, its sales aggregating, in 1885, the large sum of $81,420,000. The surprise with which the visitor views the stately piles that are the outward and visible signs of the vast commercial and financial interests of the city, the creation of a few brief seasons, is no greater than the astonishment with which he realizes the absence of all appearance of immaturity. In no city in the Union are the business quarters more solid and substantial; in none is the domestic architecture more attractive. Nothing is crude, nothing tentative, nothing transitional.

Clustered around the great Falls of St. Anthony, stand those colossal flouring mills that have been more than ever the pride and glory of Minneapolis, since they enabled her to pluck from Chicago's crown one of the brightest of its jewels. It is a startling commentary upon the much vaunted supremacy of the great metropolis of the West, that, while the wheat attracted to its market fell gradually from 34,106,109 bushels in 1879, to 13,265,223 bushels in 1885, the amount handled by the millers of Minneapolis increased, within the same period, from 7,514,364 bushels to 32,112,840 bushels. The mills have a total flour-manufacturing capacity of 33,973 barrels per day, an amount equal to the necessities of the three most populous States of the Union, or of one-half the population of Great Britain.

But to turn from the romance of figures to that of song and story. Should the traveler have any desire to visit the far-famed falls of Minnehaha, it is now he should gratify it. Situated almost midway between the two cities, they can be easily reached, either by train, carriage or river steamboat. The poetic interest with which they have been invested by their association with the legend of Hiawatha constitutes but the least of their claims upon the traveler's notice; and, should he turn aside to visit them, not even the sublime scenery of Wonderland will entirely efface the memory of their laughing waters.

The residents of St. Paul and Minneapolis are fortunate in having, within easy access, two of the most beautiful of Minnesota's ten thousand lakes, White Bear and Minnetonka. Justly celebrated for the beauty of their scenery and the excellence of their hotel and other accommodations, they are resorted to annually by thousands of visitors from far and near. Minnetonka is not inappropriately called the Saratoga of the Northwest; but no designation, however high-sounding or significant, can do justice to the exquisite beauty of its scenery or the sumptuousness of its hotels.

It is time, however, that we were directing our steps toward that scarcely less luxurious hotel which is waiting to convey us to the fir-clad slopes of

Puget Sound! While holding in honorable remembrance the names of Watt and Stephenson, surely posterity ought not altogether to forget those of the inventors of the sleeping car and dining car; for the railway train of early days was hardly a greater advance upon the old stage-coach than is the completely equipped train of to-day over its predecessor of even twenty-five years ago.

The journey from St. Paul to Puget Sound may be said to fall into eight geographical divisions, with well-marked natural boundaries, and corresponding in the main to the divisions into which the line has been formed for operating purposes. The first extends to the Red River of the North, a distance of 275 miles, lying wholly in the State of Minnesota.

The great attractions of this State are its pine forests, covering nearly one-half of its entire area, and its numerous beautiful lakes. Of the latter, there are no fewer than 215 within twenty-five miles of St. Paul, and they extend right through the central part of the State, on both sides of the railroad, to the prairie region bordering upon the Red River. Many of them are of exceeding beauty, especially in the district known as the

LAKE PARK REGION,

a richly diversified section of country, presenting the most charming scenery.

Among the most famous, are Lake Minnewaska, on the Little Falls and Dakota division of the road, fifty-nine miles from its junction with the main line; Clitherall and Battle Lakes, on the Fergus Falls and Black Hills branch; and Detroit Lake, on the direct line to the West, 230 miles from St. Paul. All these have fine pebbly beaches, lined with beautiful borders of timber, and their accommodations for all classes of visitors—anglers, sportsmen and families—are exceptionally good.

Like all the waters of Minnesota, they teem with fine, gamey fish of many varieties. The accomplished editor of the *American Angler*, writing in his well-known journal, after a visit to the Northwest in the summer of 1885, stated, that, during a life of nearly a quarter of a century as an angler, no experience with a rod had equaled in variety and weight the two days' fishing he had had on Detroit Lake. Nor was Mr. Harris' success exceptional. A score of one hundred pounds per day on two rods, is, as he goes on to state, considered quite a modest record.

For what is locally regarded as a good catch, we must turn to that of the three gentlemen who, on the afternoon of June 1st, 1885, brought in, as the result of less than three days' work, 603 pike, 138 black bass, 178 rock bass, 28 cat-fish and 25 pickerel; the entire catch weighing 2,321 pounds. This "fish story" is well authenticated. Eastern anglers can have no conception how full of fine fish, of many varieties, these Minnesota lakes are. For black and rock bass, mascalonge, pickerel, wall-eyed pike, and an infinite variety of smaller fish, a recent writer in the *American Angler* pronounces Detroit Lake the finest

fishing ground on the continent. Nor need any angler or sportsman—for prairie chickens, ducks and deer are abundant—expect to have to look to sport to make up for the deficiencies of accommodation; for the Hotel Minnesota is said, on the highest authority, to be a gem of a hostelry for anglers, every facility and convenience they could wish for being obtainable at moderate charges.

The scenic attractions, also, are of a high order, the natural features of the surrounding country being of the most diversified character. The air is pure and invigorating, and hay fever and malarial diseases are absolutely unknown.

Lake Park is another delightful resort in this region, having good fishing and boating within easy distance, and a first-class hotel adjoining the depot.

Before arriving at Detroit, the traveler from St. Paul passes through Brainerd, the "City of the Pines." The selection of this city for the location of the machine shops of the railroad has given a great impetus to its growth; nevertheless, for deer and bear hunting, it is still one of the best localities in the State. There is fine fishing, too, in its immediate vicinity, and its hotel accommodations also are very good. Here it is, also, that travelers from the East, coming by way of the Great Lakes, join the west-bound train.

The distance to Brainerd from Duluth, the point of debarkation, at the west end of Lake Superior, is 114 miles.

The traveler, who, in 1886, visits Mr. Proctor Knott's "Zenith City of the Unsalted Seas," will find the straggling village of five years ago a busy city of 20,000 inhabitants, with abounding evidences of the commercial importance it has attained. By reason of the advantages afforded by the great waterway of the continent, for the direct shipment of wheat to the Eastern States or to Europe, Duluth has become almost as formidable a rival of Minneapolis as that city is of Chicago. It handled last year no fewer than 15,819,462 bushels of wheat, while its saw mills cut up 125,000,000 feet of lumber, and an extensive trade was also carried on in coal, salt and lime.

A few miles distant, and connected with it by a railway whose construction involved the building of an exceedingly fine iron bridge, is the city of Superior, also with excellent terminal facilities. The eastern terminus of this, the Wisconsin division of the railroad, is Ashland, an important town and favorite summer resort on Lake Superior. Midway between this town and Duluth the line crosses the Brule river, whose excellent fishing grounds its recent opening has, for the first time, rendered accessible.

The Brule river proper is a large stream, averaging 100 feet in width, of clear, cold water, flowing, its entire length, through one of the great forests of Wisconsin. With high banks, and free from low or marshy ground, it is an ideal trout stream. The best fishing on the river is to be had in a stretch of fourteen miles, extending six miles above, and eight miles below, the crossing of the Northern Pacific Railroad. The trout attain a large size, catches of three and four pound fish being an everyday occurrence. In the surrounding forest, game, including moose, deer, beaver and pheasant, is found in great abundance. Large quantities of venison were shipped hence by rail during the winter of

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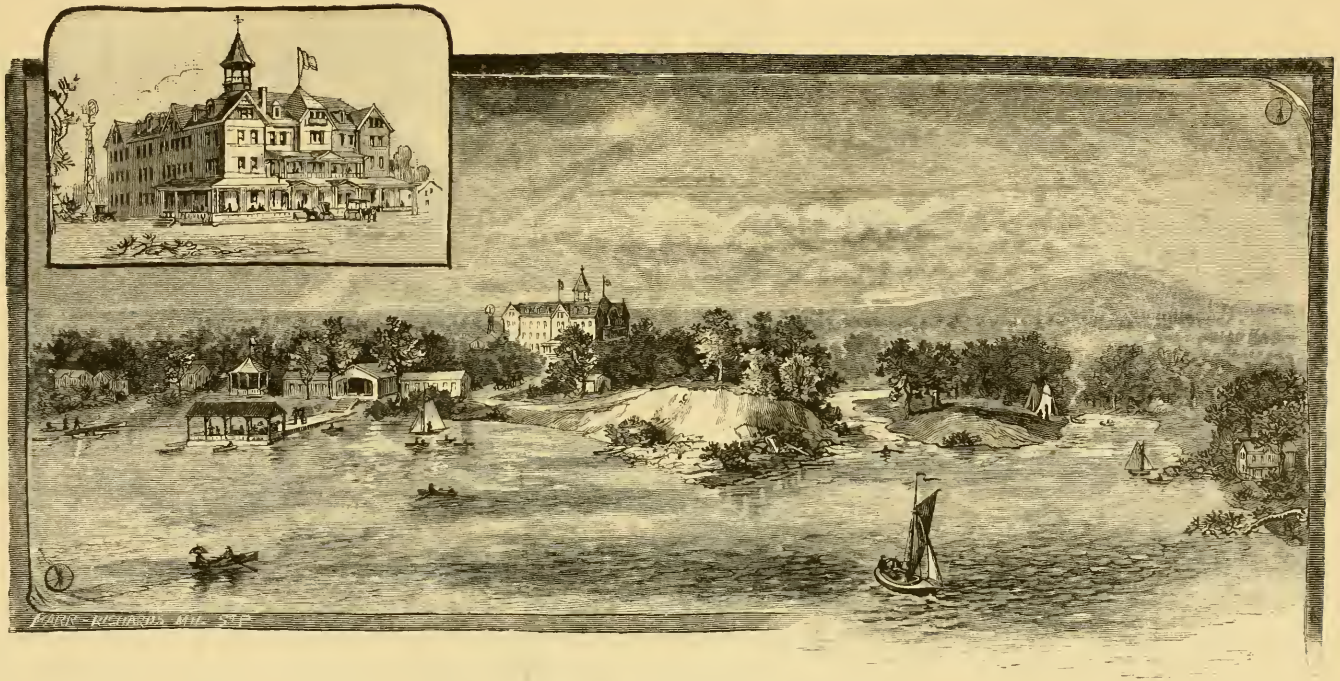


DETROIT LAKE AND HOTEL MINNESOTA, DETROIT, MINN.

1885–86, the shipments from November 1st to December 15th alone exceeding 13,000 pounds.

Almost equal to the exciting pleasures of the chase is that of shooting the Brule river rapids in a canoe. Accompanied by an experienced guide, the visitor performs this feat without danger; let him attempt it alone, and he is sure of a ducking. For the angler and sportsman, the Brule possesses an additional attraction in the fact, that, while most excellent accommodations are to be had at the railroad crossing, including boats, fishing tackle and guides, there is no settlement of any kind within a considerable distance.

The line from Duluth to Brainerd follows, for many miles, the winding valley of the St. Louis river, through scenery for the most part stern and wild, yet not without an occasional suggestion of the gentler beauty of the far-off Youghiogheny. Between Fond du Lac and Thompson the river has a descent of 500 feet in a distance of twelve miles, tearing its way with terrific force through a tortuous, rock-bound channel. The best point for observing the fine effect of these impetuous rapids and cascades, known locally as the Dalles of the St. Louis, is near the twentieth mile post westward from Duluth.

Pursuing its way in the direction of Brainerd, the train traverses a country comparatively little known. Its scanty population is engaged almost entirely in logging, lumber manufacturing, and hunting, the immense forest covering the face of the country abounding with deer, bear, wolves, foxes and other game.

Emerging from the deep recesses of the forest, and passing swiftly through the lake region already referred to, we find ourselves in a level prairie country, and can dimly descry, in the far distance, the thin, dark line which another hour's ride will show to be the narrow fringe of timber that marks the course of the famous Red River of the North, that true Arimaspes, with whose golden sands thousands and tens of thousands have been made rich.

This, then, is the renowned Red River valley, the story of whose amazing fertility has attracted, from older States and still older countries, one hundred and fifty thousand people. The greatest influx has taken place since 1880, the increase in population between the census of that year and that in the spring of 1885 being 38,719 on the Minnesota side of the river, and 54,918 on the Dakota side.

Although there are vast tracts of land still uncultivated, the general appearance of the valley is that of a well-settled agricultural country. But this will occasion no surprise to those who remember that its annual wheat crop has now reached 25,000,000 bushels, and its crop of other cereals 15,000,000 bushels.

Not a little surprise, however, is occasioned by the discovery that the "valley" of which the traveler has heard so much is not a valley at all, but a great plain, whose slope toward the river is so slight as to be wholly imperceptible.

Where the railroad crosses the river, have sprung up the cities of Moorhead and Fargo, the former in Minnesota, the latter in Dakota. With such advan-

tages of situation as they possess, and with the days of booms, with all their unhealthy excitement and fictitious values, gone, never, it is to be hoped, to return, these cities must continue to increase in commercial importance, with the development of the rich country surrounding them.

Fargo is, indeed, the largest city in the entire Territory of Dakota, and will probably retain its position as such for many years to come.

It is needless to repeat here the oft-told story of Dakota's marvelous growth. Time was when it was capable of being wrought up into a mosaic of wondrous interest and beauty; but, with the multiplication of agencies for giving it publicity, its charm, for the present generation at least, has passed away. It will, nevertheless, afford the historian of the nineteenth century material for one of the most interesting and instructive chapters of his work.

Writing, in 1828, his "Principles of Population," the great historian of Europe said: "The gradual and continuous progress of the European race toward the Rocky Mountains has the solemnity of a providential event: it is like a deluge of men rising unabatedly, and daily driven onward by the hand of God." But at that time the State of Illinois, but half way toward the Rocky Mountains and one-third of the way to the Pacific Ocean, was almost the limit of its mighty flow. Wisconsin, with no noteworthy settlements of its own, formed part of the Territory of Michigan; Iowa was an altogether vacant region, without any form of organized government; while other great States of to-day were still either mere parts of the Louisiana purchase, with as yet no separate identity, or were comprised within the then far-extending territory of the republic of Mexico.

The traveler to the Northwest, by the Northern Pacific Railroad, traverses that section of the far-extending dominion of the American people that was the last to be overspread by that great tide of civilization. He sees its evidences in the happy and prosperous homesteads that dot the fertile plains of Dakota, and nestle under the sheltering bluffs of the winding valleys of Montana; he is able to bear witness, also, to its having penetrated the fastnesses of the Rocky Mountains, and converted the hillsides of Eastern Washington and the fair lands of Oregon into smiling wheat fields and fruitful orchards.

But, notwithstanding the hundreds of flourishing settlements scattered along the great highway of travel, with here and there a goodly town or city, he can not but wonder at the apparent sparseness of population when he remembers that one and a half millions of people have their homes between the Great Lakes and Puget Sound.

But let him consider the vast extent of the country; let him call to mind that Dakota, with her 415,664 inhabitants, has yet 230 acres of land to every man, woman and child within her borders, her population averaging less than three to the square mile; that the density of population in Oregon and Washington is but two and one-half and two to the square mile, respectively; while both Montana and Idaho have considerably more square miles than they have inhabitants.

The county of Cass, which stretches westward from Fargo, is one of the best settled sections of the Northwest, there being no land whatever subject to entry. It contains some of the largest wheat farms in the world, and it has produced more than one wheat crop of 5,000,000 bushels. This county has an actual wealth of over $20,000,000, and, with its 120 school houses and numberless churches, it may be taken as admirably illustrating both the capabilities of the country and the character of the people who are building it up.

At Dalrymple, eighteen miles from Fargo, and at Casselton, two miles farther west, are the

GREAT WHEAT FARMS

of Mr. Oliver Dalrymple, comprising some 50,000 acres. Continuing westward, we pass, in rapid succession, various flourishing settlements, among them being Valley City, on the Sheyenne river, the judicial seat of Barnes county.

Presently the train descends into the valley of the James, or Dakota, river, and the prosperous city of Jamestown is reached.

From this point a branch line extends northward, ninety miles, to Minnewaukan, at the west end of Devil's Lake. This remarkable body of salt water, with its deeply indented and richly wooded shores, where the briny odor of the ocean mingles with the fragrance of the prairie flower, is surrounded by some of the best farming lands in Dakota. Its attractions for the tourist, angler and sportsman have obtained wide recognition, fish and game being very plentiful, the climate highly salubrious, the scenery picturesque, and the hotel accommodations good. The James river is said to be the longest unnavigable river on the continent, if not in the world, its flow, for hundreds of miles, being distinguished by scarcely any perceptible increase of volume.

Crossing a high table land, 1,850 feet above sea-level, and 950 feet higher than the Red river at Fargo, and known geographically as the Coteaux de Missouri, the train rapidly pursues its way past various large and well-managed farms to Bismarck, the capital of the Territory.

This city has long commanded an important trade with various settlements on the Upper Missouri, the steamboats employed having transported as much as 45,000,000 pounds of freight within a single brief period of navigation. It is the shipping and distributing point of a vast area whose only railroad facilities are those afforded by the great transcontinental line that here crosses the Missouri river. With the various important settlements that have been established in that great tract of country, Bismarck has either stage or steamboat communication. While, however, river navigation is limited to a comparatively short season, the stages run regularly all the year round, having even been known not to miss a single trip, or to be more than a few hours late, during an entire winter.

But it is not the Fargos, the Jamestowns or the Bismarcks with which the tourist chiefly concerns himself. They attract his attention only because of the evidence they afford of the development and stability of the country, and

the enterprise of the people, and he is far more interested in the crossing of the Missouri river, than in either of the two cities that frown at each other across its turbid waters.

The bridge, by which the railroad is carried across the great river, here 2,800 feet in breadth, although 3,500 miles from the Gulf of Mexico, is a structure of immense strength, and not more substantial than it is graceful. It consists of three spans, each of 400 feet, and two approach spans, each of 113 feet, with a long stretch of strongly built trestle work over the gently sloping west bank of the river.

Here the train runs into Mandan, a pleasant little city, nestling under low ranges of hills which encompass it on three sides. This is the terminus of the Missouri and Dakota divisions of the road. The change from Central to Mountain time is made at this point, and the west-bound traveler sets his watch back one hour.

The country west of the Missouri river presents an entirely different appearance from that through which the tourist has been traveling since he entered the Territory at Fargo. It is more diversified ; its numerous streams, with handsome groves of cottonwood upon their banks, meandering through pleasant valleys, clothed, where still uncultivated, with that nutritious bunch grass, which, but a few short years ago, made them the favorite feeding grounds of the buffalo. The vast beds of lignite coal that underlie this portion of the Territory crop out at various points, twelve car loads being mined daily at Sims, 35 miles west of Mandan, for shipment by rail. The most important settlements on this division of the road are Gladstone and Dickinson.

Twenty miles west of the latter town, the line enters the singular and picturesque region known as the Bad Lands of the Little Missouri. For a full hour the train pursues its way through scenery of which the whole world is not known to afford any counterpart.

The product of natural forces, still working to the same end, the picture that meets the astonished gaze of the traveler, suggests, where it does not utterly bewilder, either supernatural agency or the operation of laws whose reign has ceased. Reasonable hypotheses all failing, one's imagination connects the weird and mysterious scene with some early geologic epoch when, perchance under the brooding darkness of night, the yet plastic earth was tortured by some wild spirit of Caprice into the fantastic forms in which we see it to-day. But evidences of intelligent design are not altogether wanting, and we turn from mounds of wonderful regularity and symmetry of form, standing like Egyptian pyramids, to reproductions of the frowning battlements of Gibraltar or Ehrenbreitstein, or the dome and towers of some great cathedral.

Marvelous as they are, however, these forms and outlines excite even less astonishment than the wealth of coloring in which they are arrayed. Composed largely of clay, solidified by pressure, and converted into terra-cotta by the slow combustion of underlying masses of lignite, each dome and pyramid and mimic castle is encircled with chromatic bands presenting vivid and startling

contrasts. Huge petrifactions and vast masses of scoria contribute to the weirdness of the scene, and, as if to complete its plutonic appearance, smoke goes up unceasingly from unquenchable subterranean fires.

It is a mistake to suppose that these lands are worthless for agricultural or stock-raising purposes. The valleys and ravines are covered with nutritious grasses, and thousands of cattle may be seen grazing where the buffalo and other herbivorous wild animals were wont to roam in days gone by. The term "Bad Lands" is a careless and incomplete translation of the designation bestowed upon the country by the early French *voyageurs*, who described it as "*mauvaises terres pour traverser*."

At the crossing of the Little Missouri, the Marquis de Mores, a wealthy young French nobleman, has established the headquarters of an extensive stock raising and dressed meat shipping business.

From this point, Medora, excursions may be made to Cedar Cañon, one of the most interesting localities in the Bad Lands; or to the burning mine, where may be seen, raging, perhaps the most extensive of the subterranean fires of the entire region. It is also a good point from which to start out on hunting expeditions, large game being by no means exterminated.

Sixteen miles beyond the Little Missouri, the train passes Sentinel Butte, a lofty peak rising precipitously from the plain on the south side of the railroad. One mile more and the Montana boundary is crossed, at an elevation of 2,840 feet above sea-level.

In crossing the great Territory of Dakota, the tourist has traveled 367 miles; in traversing that of Montana, he performs a journey of no less than 800 miles, almost equivalent to the distance from New York to Indianapolis. Fortunately, the luxurious appointments of the train render weariness well nigh impossible, and the trip hourly becomes more interesting and enjoyable.

At Glendive, 692 miles from St. Paul, the road enters the valley of the Yellowstone, the windings of which famous river it follows, more or less closely, for 340 miles.

The valley, from five to ten miles in width, is inclosed by high bluffs of clay and sandstone, their curious formations occasionally reminding the traveler of the Bad Lands, though they have but little variety of color.

If the Red River of the North may justly be regarded as the true Arimaspes, the Yellowstone may, with equal propriety, be designated the modern Amphrysus. It is upon its banks and those of its tributaries that there has been developed, since the opening of the Northern Pacific Railroad, that vast grazing interest which has given Montana as great a reputation for its stock as Dakota has for its wheat.

For many years,—up to and including the winter of 1881–82,—this was the finest buffalo hunting country on the continent. But the slaughter that season was enormous, 250,000 hides being shipped East, principally from Miles City. Few have been seen since that time. There are hunters who believe that small herds might still be found north of the international boundary; but, so far as the

United States is concerned, the buffalo is practically extinct. There is, however, a small herd in the National Park. Safe from the hunter's deadly repeater, they will probably multiply rapidly, as it may be supposed that they will soon know instinctively the limits within which they are unmolested.

Miles City, a few years ago the principal rendezvous of the hunter, is now the great resort of the grazier and cowboy, it being the metropolis of the stock interest of the Territory.

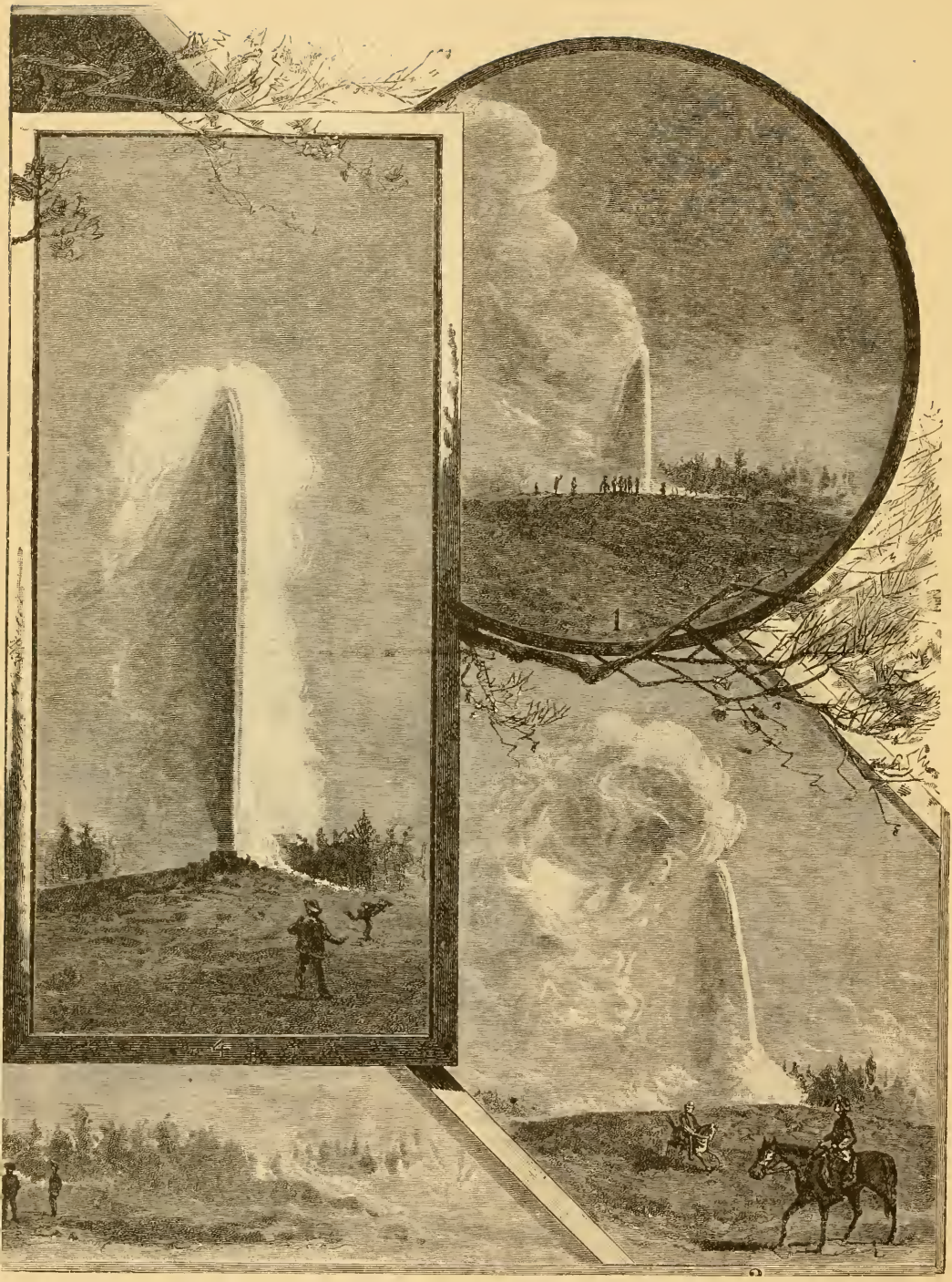
The development of this interest within recent years has been as rapid as that of wheat raising in Dakota, and the economist who should turn to the United States census reports for 1880 for the present condition of any considerable section of the Northwest would be led seriously astray.

In 1880, Montana contained 490,000 cattle and 520,000 sheep. According to a recent report of the Governor of the Territory, it contains, at the present time, 900,000 cattle, 1,200,000 sheep, and 120,000 horses. The grazing interests of the West are moving steadily toward Eastern Montana; for, so rapidly do cattle thrive on the nutritious grasses of these northern valleys, that a yearling steer is worth $10 more in Montana than in Texas.

Glendive, already mentioned as the point at which the railroad enters the Yellowstone valley, is second only to Miles City in importance as a shipping and distributing point. It is also a divisional terminus of the railroad.

Two miles west of Miles City is Fort Keogh, one of the largest and most beautiful military posts in the United States. It was established in 1877 by Gen. Nelson A. Miles, as a means of holding in check the warlike Sioux. There are but few Indians to be seen now along the line of the railroad, and those are engaged in agricultural and industrial pursuits. The extinction of the buffalo has rendered the Indian much more amenable to the civilizing influences brought to bear upon him than he formerly was, and very fair crops of grain are now being raised at the various agencies. At the Devil's Lake Agency, 60,000 bushels of wheat were raised in 1885, and purchased by the United States Government at $1 per hundred pounds. The Crows, along the northern border of whose reservation—nearly as large as the State of Massachusetts—the road runs for two hundred miles, are said to be the richest nation in the world, in proportion to their numbers, their wealth aggregating $3,500 per head. This, however, is due to the natural increase of their live stock, chiefly ponies, rather than to their own industry and thrift.

Out amid the solitudes of the far Northwest—for it must not be supposed that the entire country is a succession of settlements—it is wonderful with what interest the traveler regards that trivial event of daily occurrence, the meeting of the east-bound train. But, as he peers through the car window, or stands out on the platform, in critical survey of its passengers, it probably does not occur to him that he is as much an object of curiosity to them as they are, each of them, to him. He represents the far East of this great continent, they the far West. He, perchance, is making his first trip to the Pacific slope, they theirs to the Great Lakes or the Atlantic coast. Among them, however, may



VIEWS OF "OLD FAITHFUL" GEYSER, YELLOWSTONE NATIONAL PARK.

be distinguished merry groups of returning tourists, while, reclining in a luxurious Pullman car, or tempting dyspepsia with the rich and varied dainties of the dining car, may be seen one of the early settlers of California, a weather-beaten pioneer, who reached the Pacific slope by way of the Horn, twenty years ahead of the first transcontinental railway, and now goes east, by the Wonderland route, to revisit the scenes of his childhood.

Twenty-nine miles east of Billings, the next divisional terminus and important trading point on the line of the road, the traveler will observe, rising from the right bank of the river, a huge mass of sandstone, interesting as bearing upon its face the name of William Clarke, cut in the rock by the veteran explorer himself, when he visited the locality in 1806. He will, about the same time, be able dimly to descry the peaks of the Big Snow Mountains, which, at first scarcely distinguishable from the fleecy clouds that hang around them, subsequently loom up grandly, constituting one of the most beautiful pieces of scenery in the Northwest.

The disciple of Izaak Walton will not have traveled 225 miles along the banks of the Yellowstone without having seen many an inviting spot for indulgence in what his great master called the most calm, quiet and innocent of all recreations. His arrival, therefore, at Billings, the largest town on the upper river, and the metropolis—notwithstanding that it has a population of only 2,000—of a region larger than Maine, South Carolina, West Virginia or Indiana, affords a not unfitting opportunity for a brief reference to the incomparable trout fishing afforded by the numerous streams accessible from points on the Montana and Yellowstone divisions of the road.

The Yellowstone river itself, west of Billings, has no superior as a trout stream. It contains trout of four distinct varieties, and fishing is so easy as at times to be in danger of losing its charm. The individual scores of various tourists, reported in the *American Angler* during the summer and fall of 1885, and not containing any that were phenomenally large, averaged twenty-five trout per hour for each rod, a record with which the most ardent angler ought surely to be satisfied. A majority of these scores were made in the vicinity of Livingston, near which town another visitor is reported to have caught twenty-one fine, large trout "after supper," while two others are stated to have brought in 160 as the result of "a day's sport." The Yellowstone also contains a gamey fish known to local anglers as grayling, but pronounced by Mr. W. C. Harris to be the whitefish (*Corregonus tullibee*). That gentleman refers, in a recent article, to the abundance, in these waters, of the celebrated "cut-throat" trout, whose size and abundance, in conjunction with the picturesqueness of its habitat, will, he adds, when generally known, "make a visit to the Yellowstone imperative to the angler who aspires to a well-rounded life as a rodster." Among other waters, mention may be made of Rosebud Lake, a beautiful spot reached by wagon from Billings, where the trout fishing is declared to be splendid; Little Rosebud Creek, near Stillwater, where eighty-seven trout are reported to have been caught in four hours with a single

rod; Prior Creek, near Huntley; Mission Creek, twelve miles east of Livingston; and Sixteen-Mile Creek, sixteen miles from Townsend, all of which are said by visitors to afford excellent sport.

It must not, however, be supposed that the angler enjoys a monopoly of sport in this country of varied attractions; for grouse and ducks are plentiful, as are also, on the mountain ranges, deer, elk and antelope.

Passing Springdale, where the traveler will observe hacks in readiness to convey visitors to Hunter's Hot Springs, two and one-half miles distant, the train approaches, amid scenery increasing in grandeur, the little city of Livingston. Whatever interest may, in the near future, attach to this place as a resort of the gentle brotherhood from all parts of the continent, it will certainly fall short of that which will belong to it as the gateway of that world-renowned region, the

YELLOWSTONE NATIONAL PARK.

"Situated," to quote the distinguished geologist, Professor John Muir, of California, who recently visited it, "in the heart of the Rocky Mountains, on the broad, rugged summit of the continent, amid snow and ice, and dark, shaggy forests, where the great rivers take their rise, it surpasses in wakeful, exciting interest any other region yet discovered on the face of the globe." While it contains the most beautiful and sublime of mountain, lake and forest scenery, its fame rests, not upon that, but upon the extraordinary assemblage of the curious products of Nature's caprice, and the infinitely wonderful manifestations of almost extinct forms of her energy that are found within its borders. Approached by a branch of the Northern Pacific Railroad, extending southward from Livingston to its northern boundary, and the only railroad within one hundred miles, this remarkable region has, by a judicious expenditure of public money and by admirable individual and corporate enterprise, been rendered so easy of exploration that the tourist may within the brief period of five days visit all its most interesting points.

So majestically do the snow-capped mountains tower above the lesser hills that inclose the charming valley whose various windings the railroad follows, from Livingston to Cinnabar, that the traveler can scarcely believe that still more magnificent scenery lies beyond. And truly the cloud-piercing Emigrant's Peak, with its famous mining gulch; the yet loftier Electric Peak; the colossal Sphinx; and that most singular formation, the Devil's Slide, form the most fitting introduction that the human mind can conceive to the wonders of the National Park.

Conveyed by an excellently equipped Concord coach from the terminus of the railroad to the hotel at Mammoth Hot Springs, six miles distant, the tourist finds himself surrounded by all the conveniences of modern hotel life.

And within full view of the hotel, from which they are distant but a few hundred yards, are the exquisitely filigreed and richly colored terraces formed by the Mammoth Hot Springs, not the least of the wonders of this famous region.

Here one hardly knows whether to admire more the delicacy of the formation or that of the coloring, the former not being excelled by that of the finest lace, while the latter surpasses, both in brilliancy, harmony, and subtle gradations, any chromatic effects known to exist beyond the limits of this enchanted ground.

The keenest interest of the newly arrived tourist, however, usually centres in those constantly recurring evidences of tremendous force, the geysers. With few and unimportant exceptions, these are found within the limits of certain distinctly marked areas, known as the upper, middle, lower and Norris basins, to which one or two days' time is devoted, according to circumstances. The most celebrated of the geysers—those with whose names the world has been made familiar by the pen, brush or camera of author or artist—are in the upper basin. Here are found the Giant and Giantess, the Castle and Grotto, the Bee Hive, the Splendid and the Grand. Here, too, is Old Faithful, the constancy of whose hourly eruption makes it impossible for even the most hurried

MAMMOTH HOT SPRINGS HOTEL—YELLOWSTONE NATIONAL PARK.

visitor to the upper basin to leave without witnessing at least one display of its tremendous energy.

The reader, who, not having visited the National Park, has yet gazed into some of the profound gorges to be found in the great mountain ranges of the far West, will read with astonishment, if not with incredulity, that there is but one cañon in the world,—the Grand Cañon of the Yellowstone. Perhaps slightly exceeded in depth, as it certainly is in gloom, it is yet made to stand pre-eminent among the natural wonders of the world by the majesty of its cataract and the gorgeous blazonry of its walls. To say that the former—no mere silver ribbon of spray, but a fall of great volume—is a little more than twice the height of Niagara, would, by means of a familiar comparison, enable almost any one to form a not altogether inadequate conception of its grandeur. But for the matchless adornment of its walls, we have no available comparison; naught but itself can be its parallel. One great writer describes it as being hung with rainbows, like glorious banners. Another, borrowing from Mr.

Ruskin, likens it to a great cathedral, with painted windows, and full of treasures of illuminated manuscript. But, as we take our stand on the brink of the Falls, with twelve miles of sculptured rock spread out before us, rising from 1,500 to 2,000 feet in height, and all aflame with glowing color, we have to acknowledge, with a distinguished writer and a no less celebrated artist, that, neither by the most cunningly wrought fabric of language, nor the most skillful manipulation of color, is it possible to create in the mind a conception answering to this sublime reality. For countless ages, frost and snow, heat and vapor, lightning and rain, torrent and glacier, have wrought upon that mysterious rock, evolving from its iron, its sulphur, its arsenic, its lime and its lava, the glorious apparel in which it stands arrayed. And the wondrous fabrication is still going on. The bewildered traveler would scarcely be surprised to see the gorgeous spectacle fade from his vision like a dream: but its texture is continually being renewed; the giant forces are ever at work; still do they—

"Sit at the busy loom of time and ply,
Weaving for God the garment thou seest Him by."

For the minor wonders of this world of marvels, the formations of geyserite and the petrified forests, Tower and Gibbon Falls and the cliffs of volcanic glass, the caldrons of boiling mud and transparent pools of sapphire blue, the reader is referred to special guides to the Park.

It only remains to be stated that there is regularly established transportation daily between all the principal points, that the distances are not fatiguing, that the charges are reasonable, and the equipment everything that could be desired.

The angler need scarcely be reminded that this is the far-famed region where the juxtaposition of streams of hot and cold water enables him to cook his fish as fast as he can catch them, without moving from his seat or taking them off the hook!

WESTWARD STILL.

Resuming his westward journey at Livingston, the traveler finds himself ascending the first of the two great mountain barriers that had to be surmounted by the engineers of the Northern Pacific Railroad. By a grade of 116 feet to the mile, the line reaches, twelve miles from Livingston, an elevation of 5,565 feet above sea-level. Here it is carried under the crest of the range by a tunnel 3,610 feet in length, from which it emerges into a fine, rocky cañon, at the western portal of which is the military post of Fort Ellis. A few minutes more, and the train runs into Bozeman, a beautifully situated and flourishing little city of twenty years' growth. Few cities can boast of more magnificent scenery, majestic snow-capped ranges standing out against the sky on every side.

Westward for thirty miles extends the rich and fertile Gallatin valley. It is no uncommon thing to get forty bushels of hard spring wheat, or sixty bushels

of fall wheat, to the acre in this valley, and its barley is of such superior excellence as to be in great demand for malting purposes at Milwaukee and other Eastern cities.

Twenty-nine miles west of Bozeman, are Gallatin City, and the bright little town of Three Forks, commanding the valleys of the Madison and Jefferson, the agricultural lands of which, now being brought under cultivation, are not inferior to those of the older settled valley of the Gallatin.

Four miles more, and the tourist comes upon a point of considerable geographical interest, the three mountain streams just mentioned pouring their waters into a common channel, to form the Missouri river. It is through a rocky cañon, abounding in wild and magnificent scenery, that the greatest river on the continent enters upon its long course of 4,450 miles. For nearly fifty miles, the line follows its various windings, until finally the river runs away northward through that profound chasm known as the Grand Cañon of the Missouri, or the Gates of the Rocky Mountains. Visitors to Helena will find an excursion to the Grand Cañon, occupying not necessarily more than two days' time, one of the most delightful experiences of their transcontinental journey.

The most important town between Bozeman and Helena, is Townsend, the shipping and distributing point for no inconsiderable portion of one of the best counties in Montana. It has daily communication by coach with White Sulphur Springs, a health resort of great local repute. This coming rival of older and hitherto more famous spas, lies in a beautiful valley, 5,070 feet above sea-level, and surrounded by the grandest of Rocky Mountain scenery. Its accommodations for visitors of all classes are most excellent, including, as they do, one of the best hotels in the Territory. Six miles distant are Castle Mountain and Crystal Cave, the latter a cavern of great extent, having twenty-three separate chambers, full of curious and beautiful stalactitic and stalagmitic formations. The town, mountain and cavern were all fully described and admirably illustrated in the *West Shore Magazine* for July, 1885.

Not so much by way of tribute, either to its own beauty or that of its situation, as in recognition of its wealth, its commercial importance and the commanding position it has so long occupied in the mining world, Helena, the capital of the Territory, is called the Queen of the Mountains. Situated on the eastern slope of the continental divide, 1,155 miles from St. Paul, it became a great distributing point and financial centre, even when hundreds of miles of mountain and prairie separated it from the nearest railroad. Dependent upon the Missouri river for its commercial intercourse with the world, it was in a state of well-nigh complete isolation during the greater part of every year. Under other conditions, this comparative isolation would have stunted its growth and cramped the energies of its people. But with the assured product of their labor such a commodity as gold, with its universality of demand and stability of value, the sturdy settlers in Last Chance Gulch had always the most powerful of incentives to restless energy. With the steadily increasing pro-

duction of the precious metals, if not in its own immediate vicinity, at least in the country it dominated, Helena grew rich, until now it claims to be the wealthiest city of its size in the United States.

It was on the afternoon of the 15th of July, 1864, that a party of four miners, weary and sick at heart, pitched their tents in that desolate-looking gulch where now stands this flourishing city. Disappointed at not being able to secure claims in the then prosperous camp of Virginia City, and reduced to great extremity, they regarded the little gulch on the Prickly Pear as their "last chance." Finding gold in paying quantities, they resolved to settle down; and it is said, that, before two years had elapsed, each of them was worth $50,000.

In the meantime, the little camp in what was thenceforward known as Last Chance Gulch had attracted miners from all parts of the Rocky Mountains. It is stated, in a recent official publication of the Territory, that the gulch yielded $30,000,000 during the first three seasons it was worked; but these figures so far exceed the popular estimate, that they are repeated only under reserve. The present annual production is said to be about $50,000. It would seem to the visitor as though every square foot of ground had been dug up, and, if it be his first experience of a placer mining district, its appearance will strike him as singularly novel.

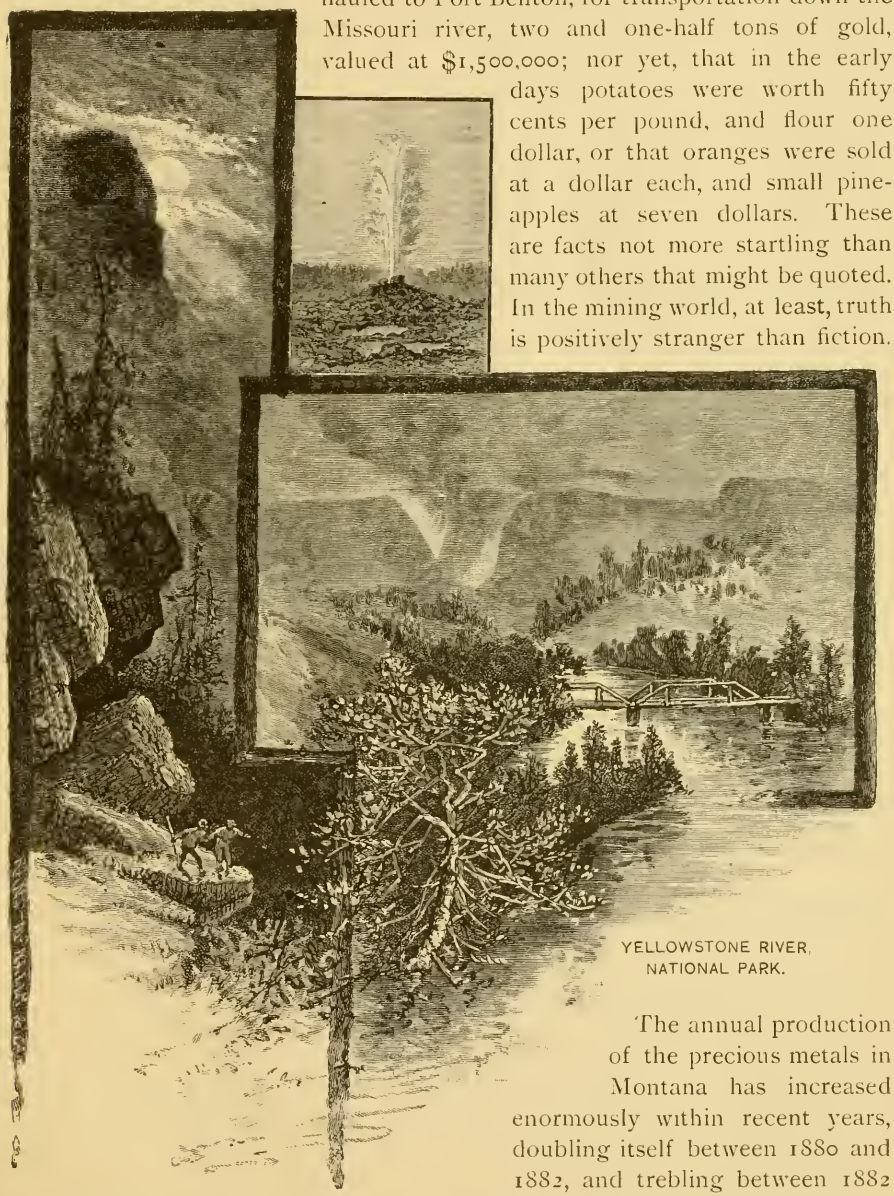
The romance of mining is well illustrated by the story of the citizen of Helena who was digging out a cellar to his house, when a passing stranger offered to remove the pile of earth that was being heaped up in the roadway, and promised to return with one-half of whatever dust he might obtain by the washing to which he proposed to submit it. Permission granted and the earth removed, the citizen thought no more of the matter. Great, therefore, was his astonishment when, a few days later, the half-forgotten face of the stranger appeared at the door, and he was handed, as his share of the yield of that unpromising dirt, the equivalent of $650.

Possibly, however, a story involving only a paltry sum of three figures, may not answer to the reader's conception of the romantic. It does not excite his imagination. He expects to read of millions. If so, let us turn to the story of the miner, who, confident that he was the possessor of a valuable claim, held on to it in spite of the most adverse circumstances, hiring himself out in winter that he might have a little money wherewith to work upon his claim in summer, until, at last, after eight years of indomitable perseverance and patient toil, he was able to sell his property for $2,250,000; or that of the weary and penniless wanderer, who, having tramped all the way from Nevada, began a toilsome search, to be continued through much suffering and privation for several years, but destined to be rewarded at last by the discovery of one of the richest veins of gold in the Territory, a vein that has yielded, up to the present time, $4,000,000 worth of gold.

The tourist will find an hour's chat with an old-timer an interesting and not altogether unprofitable exercise, albeit he may find it hard to discriminate

between statements that he may venture to repeat and those made for his especial benefit as a tenderfoot.

He need not, however, discredit such stories as that a four-mule team once hauled to Fort Benton, for transportation down the Missouri river, two and one-half tons of gold, valued at $1,500,000; nor yet, that in the early days potatoes were worth fifty cents per pound, and flour one dollar, or that oranges were sold at a dollar each, and small pine-apples at seven dollars. These are facts not more startling than many others that might be quoted. In the mining world, at least, truth is positively stranger than fiction.



YELLOWSTONE RIVER, NATIONAL PARK.

The annual production of the precious metals in Montana has increased enormously within recent years, doubling itself between 1880 and 1882, and trebling between 1882 and 1884. The annual output now approaches $30,000,000, and the Territory stands at the head of the gold-producing regions of the world,

notwithstanding that upward of $200,000,000 worth has been extracted from its soil.

Among the many famous mines on the eastern slope of the mountains are the Drum Lumon, shipping $80,000 worth of bullion per month, of which fully one-half may be set down as profit; the Gloster, shipping $50,000 worth per month; the Whitlach Union, long the most celebrated gold mine in the Territory; those of Red Mountain, said to be the most important undeveloped mineral field in the United States; the Clark's Fork, bordering on the National Park, and now yielding, and with no railroad facilities, 855 tons of ore per day; those of the Helena Mining and Reduction Company at Wickes, reached by a branch of the Northern Pacific Railroad from Prickly Pear Junction, and known to have shipped as much as $125,000 worth of ore in a single month; and the Lexington, which has produced silver ore averaging in assay value from $15,000 to $20,000 per ton. Visitors to the New Orleans Exposition of 1884–85 will remember the magnificent exhibits from the last-mentioned mine, as also those from the Cable and Drum Lumon mines, the latter including one solid chunk of high-grade ore weighing 1,715 pounds.

The most valuable gold nugget ever found in Montana is said to have been worth about $3,200. There is a nugget in the vault of the First National Bank at Helena, weighing 47.7 ounces, and valued at $945.80. But the most interesting sight in the city is, undoubtedly, the process of assaying at the United States Assay Office, where may also be seen those marvelously adjusted and delicately graduated scales, by which the weight of even an eye-lash can be exactly determined.

The next stage of the traveler's journey westward from Helena lies across

THE MAIN RANGE OF THE ROCKY MOUNTAINS.

It is by way of the Mullan Pass—so named from the fact of Lieut. John Mullan, U. S. A., having built a wagon road through it in 1867, to connect Fort Benton, Mont., with Fort Walla Walla, W. T.,—that the railroad is carried over the continental divide. The highest elevation of the pass itself is 5,855 feet; but, by the construction of a tunnel 3,850 feet in length, the line was made to reach the western slope without attaining a higher elevation than 5,547 feet.

It is not until Butler is reached, thirteen miles from Helena, that either the scenery or the construction of the road calls for special notice. But at that point the scenery becomes exceedingly picturesque, the rocks towering above the pines and spruce like the ruins of some ancient stronghold. From now on, too, the tourist will find constant employment in observing how the gigantic barriers, which seem to forbid all further progress, are, one after another, overcome.

Amid scenery increasing in wildness and grandeur, the train pursues its tortuous course; through Iron Ridge Tunnel, near which the track forms an

almost perfect letter S; across innumerable ravines; along rocky shelves and through deep cuttings, until at last it enters the eastern portal of the Mullan Tunnel. A few minutes later the traveler is looking out upon the grassy hills and pleasant valleys of the Pacific slope, the approach to the tunnel from the west presenting a singular contrast to the savage grandeur that distinguishes the approach from the east.

Following the valley of the Little Blackfoot, the train presently arrives at Garrison, where passengers desirous of visiting the most flourishing mining city on the American continent, if not in the world, must change cars.

"The most flourishing mining city on the American continent, if not in the world!" exclaims the reader. Even so; and yet we are not in Nevada, nor yet in Colorado; and, besides, the former is about played out; and, as for Leadville, every one remembers the disasters that overtook her, culminating, as they did, in the failure of all her four banks. The city is Butte, that, at the last United States census, had a population of only 3,363, but now claims six times that number, and has a monthly mining pay-roll of $620,000.

The line from Garrison runs through the beautiful Deer Lodge valley, in which are many fine farms. Deer Lodge City, the judicial seat of the county, is pleasantly situated 4,546 feet above sea-level. Being well laid out, it presents, with its wide streets and handsome public buildings, an exceedingly attractive appearance.

It is at the head of this valley, on the western slope of the main range of the Rocky Mountains, and fifteen miles from the Pipestone Pass, that there has been witnessed, during the last three or four years, that rapid growth of population and wealth that is without parallel, even in the marvelous annals of mining. Here, encompassed on three sides by lofty ranges of mountains, Butte pours forth the smoke of its innumerable furnaces; for not only is its production of silver so great that it has come to be designated the "Silver City," but its copper mines are such as to give employment to the most extensive smelting works in the United States. Its total production during 1885, valued at $15,000,000, viz., $5,000,000 worth of bullion and $10,000,000 worth of copper matte, was twice that of Utah, and three times that of Nevada. It also exceeded that of the whole of California, or the combined production of Idaho, New Mexico and Arizona.

The leading silver mines of the district are the Alice, Moulton, Lexington and Silver Bow, which alone employ 210 stamps and produce 230 tons of ore daily. The magnificent appliances of the Alice mine, including the great Cornish pump that cost $40,000, are the wonder of every visitor. The process of reduction, here as elsewhere, is somewhat complex, especially in the case of the baser ores, being in part chemical and in part mechanical. It involves the crushing of the ore to powder, under the pressure of enormous bars of iron, weighing 900 pounds each, and known as "stamps," and its subsequent roasting in large, hollow cylinders, salt being largely employed in the former, and quicksilver in the latter, stage of the operation. The roasting mills of the

Alice mines treat 100 tons of ore per day, and their bullion product approaches $100,000 per month.

The great Lexington property, which has produced $1,000,000 per annum for four years, is owned by a French company. It claims to be the most complete mine in the entire West, and it is certainly one of the richest and most extensive.

The Moulton and Silver Bow have a daily capacity of forty and thirty tons of ore respectively. They are magnificent properties, well developed and exceedingly productive. The former makes the proud boast of working its ore to a higher percentage of its value than any other mill in the district.

But it is the copper mines and smelters that represent the largest capital; give employment to the greatest number of men; have the largest production, both in tonnage and aggregate value; and, it may be added, make the most smoke.

At the head of the rich and powerful companies engaged in this industry, stands the Anaconda,—its mine at Butte, the greatest copper property in America; its smelting works, at the neighboring town of Anaconda, the largest of their kind in the world. Sold, five years ago, for an amount that would not now be more than sufficient to pay its employés a week's wages, its property is roughly estimated to be worth $15,000,000. With certain contemplated additions to its smelting capacity, it will handle daily 1,200 tons of ore, yielding 180 tons of matte, or 108 tons of pure copper. Its entire machinery run by water-power, it yet requires for its furnaces no less than 180 cords of wood per day; in view of which enormous consumption it is stated to have recently let a contract for 300,000 cords, representing upward of $1,000,000. Second only to this gigantic concern, is the Parrott Company, whose total matte output for 1884 was 14,856,323 pounds, containing 9,324,805 pounds of pure copper, valued, including its silver contents, at about $1,250,000. With largely increased capacity, its production of pure copper will probably have reached 15,000,000 pounds in the year just drawing to a close. Among other leading companies, may be mentioned the Montana, owning some of the richest and most steadily productive mining property in process of development; Clark's Colusa, said to have in sight, above the 300-foot level, at least 150,000 tons of valuable ore; and the Bell and Colorado, two of the richest copper-silver mines in the district.

So much for the mines and smelting works of Butte. What of the city itself? Briefly, it may be said to be a typical Western town, as seen in flush times; nothing too big for it, nothing too good; its quivering energy finding expression, now in the erection of a $150,000 court house, and now in that of the finest opera house on the Pacific slope, outside of San Francisco; its business enterprise filling magnificent stores with costly goods, suited to the tastes, pocket-books and spending proclivities of a community that on last Christmas eve spent $6,000 in presents in a single one of its stores.

There are several good trout streams in the vicinity of Butte, and it is

FALLS OF THE GIBBON RIVER, YELLOWSTONE NATIONAL PARK.

pleasant to know that, in a city whose amusements are mainly of a very different character, there are those who know how to handle the rod.

Proceeding westward from Garrison, the traveler will have some fine views of mountain scenery, including the snow-clad peaks of Mount Powell. Drummond, twenty-one miles west, is the station for the rich mining districts of New Chicago and Phillipsburg. Granite Mountain mine, near the latter place, is exceedingly rich. A vein of ore, six feet wide, and assaying from 125 to 2,000 ounces of silver to the ton, is now being worked, the output reaching $120,000 per month.

Soon the train enters Hell Gate Cañon, at first a beautiful valley, from two to three miles in width, but narrowing as we go westward, until from between its stupendous walls we suddenly emerge upon a broad plateau, where stands the city of Missoula. Formerly a remote and isolated frontier post, Missoula is now a place of considerable importance. Extending southward for ninety miles is the valley of the Bitter Root river, well watered, exceedingly fertile and thickly settled. Here are raised fine crops of wheat and oats, as well as vegetables, apples and strawberries.

The tourist has now entered the finest game country in the Northwest. At any point along the line, for a distance of nearly three hundred miles, he will find deer, elk and bear in great abundance. Let him but place himself on their trail, and he will certainly soon have them within gunshot. Even in the vicinity of Missoula there is excellent sport, one local trapper obtaining $160 bounty for bear last season. Ducks and prairie chickens are also plentiful, and various species of trout abound in the mountain streams.

The most interesting, as it is the most accessible, of the Indian reservations contiguous to the line of the Northern Pacific Railroad, is that of the Flathead tribe, through which the line runs for many miles in the course of its northwestward sweep from Missoula. At Arlee station, the visitor is within five miles of the agency, and at Ravalli a like distance from St. Ignatius mission. For a full account of the excellent work carried on among the Indians by the Jesuit Fathers, together with an exceedingly interesting description of the Flathead country generally, the reader is referred to an article in the *Century Magazine* for October, 1882, from the accomplished pen of Mr. E. V. Smalley, as well as to sundry articles in that gentleman's own magazine, *The Northwest.* From a point about 500 feet from the summit of Macdonald's Peak, a few miles north of Ravalli, there is a remarkable view of a deep mountain gorge known as Pumpelly Cañon, which has many of the striking features of the Yosemite valley, in California. Two waterfalls, having an apparent height of about 800 feet, leap into this profound rocky cañon, and form a small circular lake of a dark blue color. This lake falls, by another cataract, into a second lake of exactly the same size and shape as the first, while still another cataract leaps from the lower lake into a deep ravine filled with magnificent forest trees. An excursion to Macdonald's Peak may be made from the mission in a single day. Tourists are, however, recommended to take blankets and provisions, and

encamp upon the crest of the mountain to witness the sunrise. Saddle horses are obtainable at the mission, and there is a good trail all the way.

Thompson Falls, 101 miles west of Missoula, is the starting point for the Cœur d'Alène mines. The distress that followed the arrival in this district, in 1883, of several thousand half-starving adventurers, who, expecting to pick up in a few hours' time nuggets enough to make them rich for life, brought neither blankets to protect them from the cold of winter, nor the means of returning to their far-distant homes, or even of reaching less remote centres where work could be obtained, gave the Cœur d'Alène mines a blow from which they were slow to recover. The development that has since taken place, especially since the introduction of hydraulics, has, however, abundantly demonstrated that former claims as to the richness and permanence of the mines were well founded, and we shall probably soon see here the richest placer mining camp in the world.

The matchless river scenery that has done so much toward placing the Northern Pacific Railroad system in the proud position it occupies to-day at the head of the scenic railways of America, is not alone that of the peerless Columbia. For 140 miles of its course, in Western Montana and the Panhandle of Idaho, it follows the windings of a stream that for grand and imposing scenery is second only to that renowned river itself. Should the traveler wake up in the morning, anywhere between the point at which the waters of the Missoula empty themselves into the bright green flood of the Pend d'Oreille river and the head of Pend d'Oreille Lake, he will almost certainly suppose that it is in the current of the far-famed Columbia that he sees reflected, perhaps hundreds of feet beneath him, the varying forms of those stately mountains that soar thousands of feet above. But he is as yet almost a day's journey from the classic regions of the Columbia, albeit the lordly stream, whose scenery will be, hour after hour, a succession of surprises and delights to him, is one of the principal forks of that mighty river, whose still grander scenery it may be said to foreshadow in miniature.

Between the Yellowstone National Park, on the one hand, and the Columbia river, on the other, Clark's Fork and the beautiful lake into which it widens out before turning northward to the British possessions, have been almost completely overshadowed. But their ten thousand beauties will assert themselves. They have not to be sought for in out-of-the-way places, nor are they so localized that a mere passing glimpse is the only reward of strained attention as the train flies onward. On the contrary, from an early hour in the morning until long past noon, there is a continuous unfolding of scenes in which are combined, with Nature's inimitable skill and infinite variety, all that is grandest in mountain, all that is most graceful in woodland and stream. So evenly distributed are the beauties of this long stretch of river scenery, that it is not easy to single out particular points as calling for special notice. There are, however, two that must arrest the attention and command the admiration of every traveler. The first, one mile east of Cabinet, where the river, which has been flowing for some distance considerably below the level of the railroad, enters a magnificent

rocky gorge; and the other, about the same distance east of Clark's Fork, where it flows, without a ripple, through a forest of stately pines, whose forms are, with singular fidelity, reflected in its clear and tranquil waters. Soon it is lost to view, but only to reappear, after a short interval, in the form of the lovely

LAKE PEND D'OREILLE.

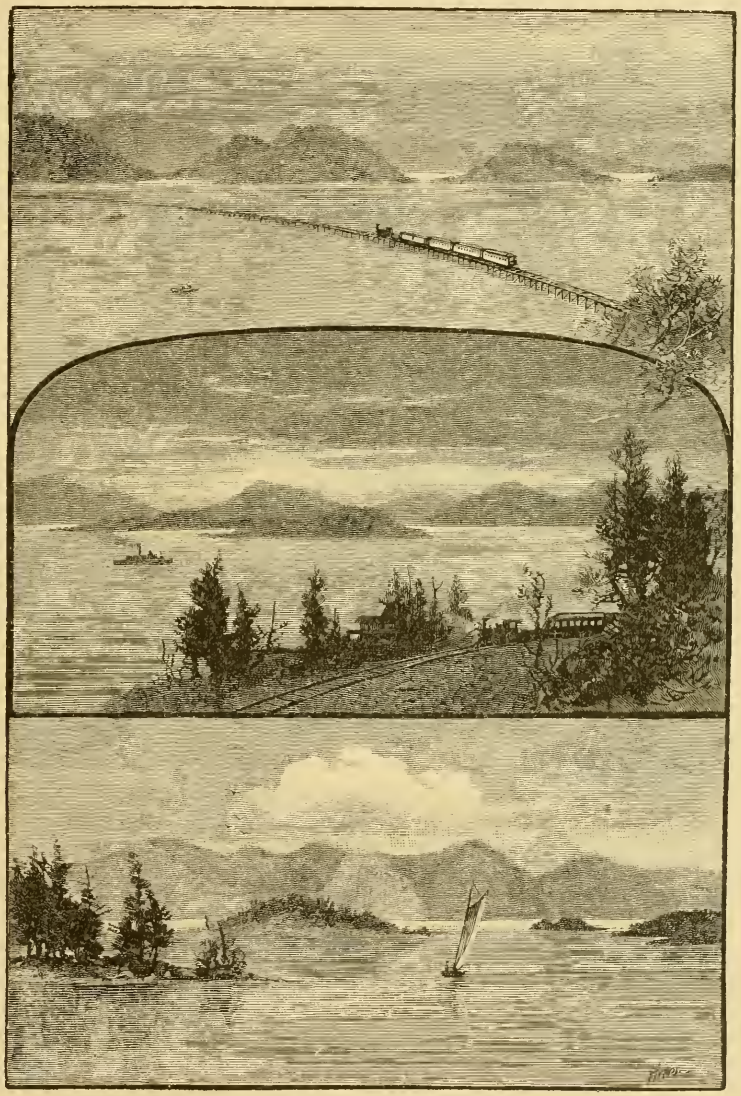
One of the largest sheets of fresh water in the West, Lake Pend d'Oreille will certainly yield to none in the beauty and variety of its scenery. Fifty-five miles in extreme length, and from three to twelve miles in width, it has an irregular shore line of probably 250 miles, richly diversified with rock and foliage, and surmounted by lofty ranges of hills. The railroad follows the north shore of the lake for about twenty-five miles, passing several little settlements, among which are Hope, Kootenai and Sand Point. Such accommodations as have hitherto been available to the visitor have been provided by respectable residents of Sand Point; but for the season of 1886 arrangements will be made that will constitute Hope the more convenient halting place. That, also, will be the point of arrival and departure for steamers making the tour of the lake.

While the view from the car windows is not to be compared with the scenery at the southern end of the lake, it must, nevertheless, be pronounced superb. In the immediate foreground, the green waters break soothingly upon a pebbly beach, or fall in crested waves. On the right and left recede into distance the deeply indented shores, here clothed with luxuriant forests, there bare and precipitous. Yonder, nineteen miles away, is Granite Point, rising perpendicularly from the water 724 feet, with Granite Mountain behind it, towering 5,300 feet above the level of the lake, itself surmounted by the snowy peaks of Pack Saddle Mountain, and they, in turn, by the great purple range of the Cœur d'Alènes.

Not a few Eastern travelers passing over the Northern Pacific Railroad have remarked upon the resemblance borne by the scenery of Lake Pend d'Oreille to that of their own famous Lake George. It is, however, if possible, even finer, the mountains being loftier, and the forests more luxuriant, than those inclosing the hitherto unrivaled lake in Northern New York.

To fully set forth the attractions of this region for the sportsman, or to do anything like justice to its waters as fishing grounds, would require more space than is devoted in this pamphlet to the entire country between the Great Lakes and Puget Sound. Nowhere, probably, in the United States, is there such an abundance of large game as in the forests of Northwestern Montana and Northern Idaho. Within a few miles of any of the stations on Lake Pend d'Oreille may be found mule deer, white-tailed deer, elk, caribou and moose, black and cinnamon bear, and mountain sheep. Of winged game, geese, ducks and partridge are plentiful, and they may be shot at any season of the year. Various applications have been made to the Northern Pacific Railroad Company, by local

hunters, for special rates for the shipment of game East; but the Company has steadfastly refused to encourage the wholesale destruction of game for commercial purposes, preferring that it should be reserved for legitimate sport.



LAKE PEND D'OREILLE, IDAHO.

The true sportsman will immensely enjoy an excursion into the Kootenai country. The best route is from Kootenai station to Bonner's Ferry, on the Kootenai river, a distance of thirty-three miles by wagon road, and thence by

boat, either down to the lake, a further distance of ninety miles, or up into the mountains. Complete camping outfits may be obtained from Spokane Falls, the nearest town on the line of the railroad.

That the waters of Clark's Fork and Lake Pend d'Oreille are full of fine fish of many varieties, is established by overwhelming testimony. The want of a common nomenclature, however, is somewhat embarrassing to one whose opportunities for personal observation have been limited. Perhaps, therefore, it will be best to allow the local anglers to tell their own stories. Beginning with the town of Thompson's Falls, to which reference has already been made, we find a recent correspondent of the *American Angler* claiming for Clark's Fork an abundance of salmon trout, of a species of large lake trout, and a species of whitefish, known locally as "squaw fish." Salmon trout are, he says, caught at all times of the year, except in midwinter and during high water in the month of June. They average from one-half to two pounds each, and the fishing is best during early spring and late fall. Lake trout have been caught weighing as much as eighteen pounds each; but the average is about six pounds. The "squaw fish" is said to be gamey, but of comparatively little value for the table. The same correspondent says that the mountain streams emptying into Clark's Fork in the vicinity of Thompson's Falls, afford excellent mountain trout fishing, and he quotes large scores made by local anglers. At Heron, which, by the way, is a divisional terminus of the railroad, with a first-class hotel operated in connection with the dining car department, trout is said to be so abundant as to be thought nothing of; "grayling," sometimes reaching ten pounds in weight, are almost as plentiful; and it is said to be no uncommon thing to see them jumping out of the water, pursued by large whitefish. Bull river, eight miles distant, yields salmon trout weighing up to twelve pounds. The waters of Lake Pend d'Oreille contain, in addition to the common lake trout, a species weighing from five to ten pounds each, and occasionally caught weighing as much as twenty pounds, speckled on both back and sides, and generally resembling Mackinac trout. They are a fine table fish, being much superior to lake trout. The "squaw fish" of this lake are said to resemble the pike. They weigh from one pound to five pounds each. From about the middle of August until the snow flies, the trout fishing is "the best in the world." There is also a fish resembling the herring, found in one part of the lake in immense shoals.

Soon after leaving Lake Pend d'Oreille, the line enters a dense forest containing few settlements, and little that is interesting or picturesque, beyond the beautiful Lake Cocolala, a long but narrow sheet of water on the north side of the track. On the borders of the forest the train pauses a moment at Rathdrum, the nearest point on the railroad to Fort Coeur d'Alène, on the lake of the same name. This lake even rivals, in the beauty of its waters and the grandeur of its mountain scenery, its more accessible neighbor, Lake Pend d'Oreille, while its conveniences for boating and fishing are equally good.

At the station of Idaho Line, the train enters the Territory of Washington, pursuing its way in a southwesterly direction across the great Spokane Plain.

A short run, and we are at Spokane Falls, a bright and busy little city, charmingly situated on the Spokane river, near the celebrated falls from which it takes its name. Built upon a gravelly plateau, sloping gently toward the river, overlooked by beautiful pine-clad hills, and with lofty mountain ranges in the far distance, Spokane Falls can not but produce a favorable impression upon the passing traveler. Its falls, which are its chief natural attraction, and will be the secret of the great commercial and manufacturing importance that undoubtedly awaits it, are situated on the north side of the town. The river is divided by basaltic islands into three great streams, curving toward each other, and pouring their floods into a common basin, from which the united waters come surging and foaming to make their final plunge of sixty-five feet into the deep chasm below. The tremendous force with which the river tears through its rocky channels, and hurls itself over the falls, is perhaps best illustrated by a comparison with the Falls of St. Anthony, at Minneapolis. While the latter represent a force of 135,000 horse power, the former represents one of 216,000 horse power, utilizable with equal facility. Several extensive flouring mills, as well as saw mills, are already in operation ; and there is no doubt that, with the development of the rich wheat country of Eastern Washington, there will come an immense extension of the manufacturing industries of Spokane Falls.

It is probable that the town will soon have two important feeders in branch lines of railway, extending, the one northward to the Colville mining region,—the other southward to the Palouse wheat country. These lines will open railway communication with two of the richest sections of country west of the Rocky Mountains.

Until within the last year or two, the settlements of the Colville valley have been confined to the scattered homes of ranchmen. But recently the tide of immigration that has been flowing into the Territory has reached this remote region, and agricultural operations of a general character are being engaged in. The valley is as fertile as it is beautiful, and not only fine wheat, but fruit of excellent quality, is being raised there.

In the Chewelah district there have recently been found so many rich veins of silver that Mr. E. V. Smalley, who visited it in November, 1885, declares that it is almost certain to become, within a few years, the greatest silver camp on the continent.

Sixteen and forty-one miles respectively westward from Spokane Falls, are Cheney and Sprague, in a good agricultural country, whose rapid development is building them up as solid and substantial towns. Cheney has a large hotel, and is, moreover, the nearest railway station to Medical Lake, a large sheet of water possessing remarkable curative properties, and situated nine miles west. Good hotels and bathing establishments having been erected, Medical Lake is now an exceedingly pleasant resort, the surrounding country being very attractive.

From Palouse Junction, sixty-nine miles west of Sprague, a line extends eastward into the Palouse country. So far as regards scenery, a ride over this

line to Colfax and Moscow is as uninteresting a railroad journey as could well be found, the line following a series of valleys that have the appearance of having once formed the rocky bed of some considerable stream.

Colfax is a busy little city in the Palouse river valley, hemmed in so closely on both sides that one of its rivals recently suggested that it might find it an advantage to be roofed over. But it does a considerable business for so small a place, shipping a large proportion of the agricultural produce of the valley, estimated, in 1885, at two million bushels of grain. The agricultural methods of Eastern Washington will strike most visitors as somewhat peculiar. It is not in every State of the Union, nor in every Territory, that the farmer can plow and sow "just when he gets ready." But here plowing and seeding may be seen in progress ten months out of every twelve, and instances have even been known of winter wheat being sown every month in the year, and all coming to harvest in its proper turn. And such crops! Thirty, forty and fifty bushels to the acre are raised so easily, that, had the farmer a nearer market, he would soon get rich. The construction of the proposed branch southward from Spokane Falls will, however, give him facilities for shipping east over the Northern Pacific Railroad that will certainly pay him better than exporting to England by way of Portland, as he does at present. The self-binding harvester, so familiar an object in many other parts of the country, is here unknown, the grain being cut by immense "headers," propelled by from four to eight horses each. This strange-looking machine, an exemplification of the old saying, "the cart before the horse," is better adapted than any other to the peculiar conditions of the country, straw being of no value, and threshing usually going on simultaneously with the cutting of the grain, although the wheat may, after cutting, lie in the fields for many weeks without detriment.

The climate of Eastern Washington, to which alone this remarkable state of things is due, differs entirely from that of the western half of the Territory, from which it is divided by the Cascade range of mountains. It is a mistake to suppose that the humidity which characterizes that portion of the Territory bordering on the Pacific Ocean, distinguishes it as a whole. On the contrary, the eastern half is remarkably dry, and that, too, without those extremes of temperature that usually accompany a dry climate. Should there be a spell of severe cold during the brief winter season, it is invariably cut short by the "Kuro-Siwo," or Japanese current, which, striking the coasts of British Columbia and Washington Territory, sends a warm wave over the entire Northwestern country, sometimes extending even to the valleys of Montana.

Continuing westward from Palouse Junction, a run of little more than an hour brings us to Pasco, the eastern terminus of the Cascade division of the railroad. This important division, intended to establish direct communication between the magnificent harbors on Puget Sound and the Eastern States, is already operated to the extent of 122 miles, or ninety miles westward from Pasco, and thirty-two miles eastward from Tacoma. Its eastern section has given a great impetus to the development of the agricultural capabilities of the

Yakima. Klickitat and Kittitas valleys, which are well adapted, not only to stock raising, but also to the cultivation of fruits and cereals. In this section wool growing is also engaged in with great success. This industry is one of considerable importance both in Washington and Oregon, the entire clip for 1885 being no less than 13,000,000 pounds.

There are few revelations more surprising to an Eastern tourist than that of the magnitude of some of the great Western rivers. The Snake river, for example, is known to him, if at all, merely as one of the various tributaries of the Columbia; and, when he finds himself crossing its mighty flood by a bridge 1,672 feet in length, and learns that its force and volume are such that it drives itself like a solid wedge into the waters of the Columbia, he is apt to wonder that he knows so little about it. Future tourists will not regard this tributary stream with any the less interest for being told beforehand that it is longer than the Rhine, more than three times the length of the Hudson, and that, straightened out, it would reach from the Missouri valley to the Atlantic ocean. It is, moreover, a great commercial highway, being navigated by steamers of considerable tonnage for 150 miles. It flows for a long distance in a deep cañon, the sides of which are so precipitous as to render the river almost inaccessible. Immense shutes have therefore been constructed for the transfer of the wheat that forms the staple product of the country from the warehouses on the high banks to the boats and barges anchored below.

Another section of the famous wheat country of Southeastern Washington, identified with the unmusical name of Walla Walla, borne by the oldest and best town east of the Cascade Mountains, is reached by a branch line extending from Wallula Junction. With 100,000 acres of land cultivated to cereals, with 800,000 apple trees, 100,000 pear, plum and peach trees, 25,000 grape-vines, large herds of cattle, and still larger flocks of sheep, the county of which Walla Walla is the judicial seat may be taken as fairly illustrating the varied capabilities of Eastern Washington. Scarcely less prosperous is the adjoining county of Columbia. These counties, however, being well settled, reference is made to them only as foreshadowing the future condition of those younger counties, adjacent to the Northern Pacific Railroad, which are now in course of settlement. In many of the latter the cultivation of the soil presents even fewer difficulties than in these older settled regions, in many parts of which there is scarcely an acre of level land to be found.

Returning to Wallula Junction, and there resuming our westward journey, we at once enter a region of surpassing interest, none other than the famous land —

"Where rolls the Oregon."

Its navigable waters within 450 miles of those of the Missouri river, the great Columbia drains an area almost equal in extent to the united area of France and Germany. Excluding the portages at the Cascades and Dalles, with several less important rapids, the river is navigable to Kettle Falls, 725 miles from its mouth. These falls, on the upper river, are not accessible by

rail, being a considerable distance above the point at which the railroad enters its valley. They are said to be more impressive even than the famous Cascades on the lower river, there being a perpendicular fall of twenty feet, and then swift rapids between rocky banks of quartz and porphyry. It is on the upper river, also, that there occur the Little Dalles, where the waters tear through a contracted channel with terrific force, constituting, at least at high water, an impassable barrier to navigation.

From Wallula to within a few miles of Portland, a twelve hours' ride, the tourist enjoys an uninterrupted succession of views of that superb scenery

MOUNT HOOD—FROM THE HEAD OF THE DALLES, COLUMBIA RIVER, OREGON.

which has given the Columbia river its world-wide reputation. Never for more than a few moments does he lose sight of its mighty flood,—now flowing onward with all the majesty of the lower Mississippi, and now surging through the rocky barriers that impede its course ; here confined within lofty basaltic walls, there inclosing numerous beautifully wooded islands ; and here again marked by long stretches of bare white sand driven continually by the unceasing winds. For some miles west of Wallula the banks of the river are low, and possess no special object of interest. It is not, indeed, until he reaches the Great Dalles that the tourist sees any indication of the magnificent scenery he is approaching.

There, however, he has his first glimpse of the queenly Mount Hood, whose snowy peak, soaring 11,225 feet above the sea, stands out sharply against the sky at a distance of thirty-five miles. The Dalles themselves, scarcely noticeable, except when the river is at flood, constitute one of the most curious and interesting sights in the world,—nothing less than that of the mighty Columbia turned on edge. Here, within a gorge so narrow that a child may fling a pebble from bank to bank, is confined the greatest river of the Northwest. The chasm through which it flows has never been fathomed, and can only be approximately determined by an inversion of the grand proportions of the river where it flows through its ordinary channel.

At Dalles City, the eastern terminus of navigation on the middle river, the tourist finds himself in an attractive town of nearly forty years' growth. Here he may with advantage make a brief stay, resuming his journey either by train or by steamer, the fine boats of the Oregon Railway & Navigation Company plying daily between this city and Portland. From the heights commanding the town, magnificent views are to be obtained, Mount Hood looming up in the southwest, and Mount Adams, another of the great peaks of the Cascade Range, in the north.

We have now left behind the low-lying shores that extend for so many miles between the Dalles and Wallula. Henceforward the scenery increases in interest every mile, the mountains becoming loftier and more precipitous, the rocky shores more rugged, and the intervening foliage more luxuriant.

It should be stated that the scenery, especially on the south side of the river, appears to much greater advantage when viewed from the deck of a steamer than when seen from the train. In consideration of this fact, railway tickets are available by steamer without extra charge. The boat leaving the Dalles early in the morning, there is a loss of one day involved in taking the steamer on the westward journey; but, returning from Portland, the tourist is able to reach the Dalles in time for that day's east-bound train.

Forty-three miles from the Dalles are the Cascades, where the river changes from a placid lake to swift rapids and a foaming torrent. Before the completion of the railroad every pound of freight had to be transferred, at this point, from a steamer navigating the river above this insurmountable barrier to one navigating it below, or *vice versâ*. The railway portage of six miles on the Washington side of the river is still operated, and the transfer of such passengers as choose to complete their journey by water is made so speedily and conveniently as to enhance, rather than otherwise, the pleasure and interest of the river trip.

In view of the importance of the river as a free commercial highway, Congress has made several appropriations for the construction, at the Cascades, of a system of locks. It is certainly a gigantic undertaking, and many years will probably elapse before its completion.

To a great convulsion of nature, of whose occurrence there is abundant evidence, may be traced a singular Indian tradition, that Mount Hood and Mount Adams formerly stood close to the river, connected by a natural bridge.

The mountains, so goes the story, becoming angry with each other, threw out fire, ashes and stones, and so demolished the bridge, choking the river, which had previously been navigable. The present remoteness of the mountains is attributed to the anger of the Great Spirit, who hurled them thus far asunder. Both, in common with other peaks of the Cascade Range, are extinct volcanoes; and the Indian tradition may have its origin either in some great eruption, or in some sudden movement of what is known as the sliding mountain, an immense mass of basaltic rock gradually wearing its way toward the river.

After gazing in admiration at the fine scenery surrounding the Cascades, the tourist will scarcely be prepared for the announcement that the grandest of all is yet to come. But, after leaving Bonneville, not only is the general effect grander and more imposing, but the objects of special interest are more numerous. Here it is that the advantage of making the trip by steamer is most apparent; for, let the train travel ever so slowly, it is impossible for even the most quick-sighted traveler to take in all the points of interest that crowd one upon another.

On the north side is Castle Rock, rising abruptly from the water's edge a thousand feet or more. Farther down the river, also on the north side, is Cape Horn, an imposing basaltic cliff projecting into the water. On the south side there descend from the lofty perpendicular walls that frown upon the river for many miles, numerous waterfalls, of indescribable beauty. Here is the lovely Oneonta, 600 feet of silver ribbon, floating from the dizzy height. A few moments more, and we are opposite the still more beautiful Multnomah Fall, which has a descent of no less than 820 feet. At this point the train stops fifteen minutes to enable passengers to ascend to the rustic bridge, there to enjoy the best possible view of this incomparable fall, and its wondrously beautiful setting, contrasting so strikingly with the wild scenery around it.

At the Pillars of Hercules, two gigantic columns of rock, one on either side the track, and forming, as it were, the western gateway to this marvelous region, the railroad leaves the river, and runs right on to Portland. The steamer continues its course, past the beautiful city of Vancouver, to the mouth of the Willamette river, by which great tributary of the Columbia, it soon reaches

PORTLAND.

Its phenomenal growth, its commanding position on one of the great waterways of the continent, its wealth, commerce and enterprise, and the singular natural beauty of its situation, render the capital of the Pacific Northwest one of the most attractive cities on the American continent.

Fifteen years ago Portland contained a population of 1,103. By 1880 the construction of the western section of the Northern Pacific Railroad, and the approaching completion of the great transcontinental system, had so stimulated the growth of the city that its population had increased to 17,577. To-day it is estimated at 30,000, or, including the suburbs of East Portland and Albina, at 40,000, and a handsomer city of its size can not be found in the United States.

In everything that distinguishes a great metropolitan city, the progress of

Portland has been even more remarkable than the rapid growth of its population. The handsome business blocks that line its principal streets bear witness to the magnitude of its trade and commerce, while its churches, schools and other public buildings testify to the high moral tone and refined taste of its citizens.

Although one hundred miles from the coast, Portland, like London, Rotterdam and Antwerp, is virtually a seaport, and its growth and progress are based upon the solid foundations of its natural advantages. Loading at its wharves, or riding at anchor on the broad bosom of the river, may be seen, not only river craft of all sorts and sizes, but ocean-going vessels of 3,000 tons. When the great wheat crop of Oregon is in course of shipment to Europe, there may be seen a fleet of as fine merchantmen as can be found in the world. The salmon exports alone, for the year ending August 1, 1885, required 120 large vessels, having a total capacity of about as many thousand tons. The total value of the exports to foreign countries for the year just mentioned, was $5,857,057, and that of domestic exports $6,699,776, making a grand total of $12,556,833. In addition to several hundred thousand tons of wheat, and the 120 ship loads of salmon already mentioned, the exports from the Columbia river included over eleven million pounds of wool, over two million pounds of hides, nearly five and one-half million pounds of hops, and twenty-nine million pounds of potatoes.

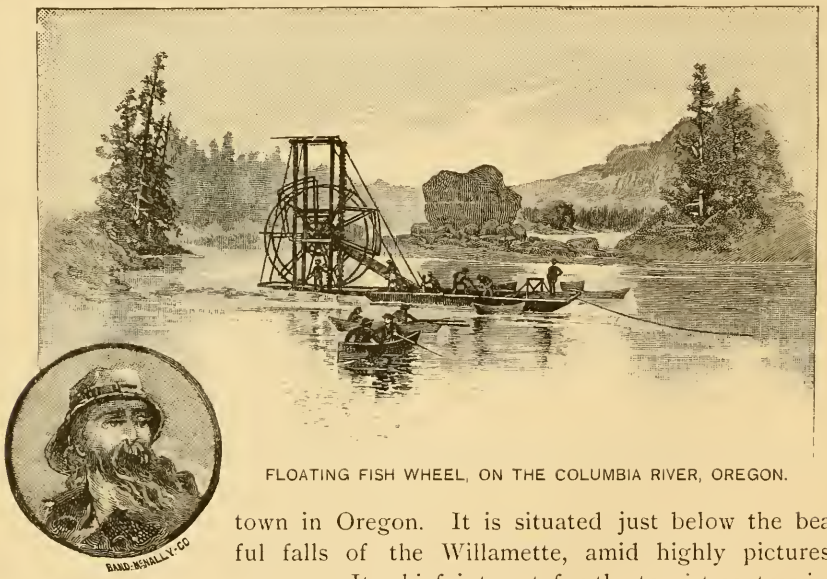
Portland is said to number among its merchant princes twenty-one millionaires, and certainly there are few cities whose private residences are more strikingly indicative of wealth and refinement. The picturesque surroundings of the city render it an exceedingly desirable place of residence. From the summit of Robinson's Hill a view that it is no extravagance to pronounce one of the finest in the world may be obtained. At one's feet lies the city, nestled in rich foliage. Stretching away, for many miles, from where their waters unite in one common flood, may be seen the Columbia and Willamette rivers. But above all, bounded only by the limits of the horizon, is the great Cascade Range, with all its glittering peaks. On the extreme right, seventy-eight miles distant, as the crow flies, is seen the snowy crown of Mount Jefferson ; across the river, fifty-one miles distant, rises Mount Hood, one of the most beautiful mountains on the coast, and the pride and glory of Oregon ; to the northeast stand out the crests of Mount Adams and Mount St. Helens, and in the same direction, but one hundred miles away, may be descried the great Tacoma, the grandest mountain on the Pacific slope. All these five peaks are radiant with eternal snow, and it may well be imagined that the effect of the uplifting of their giant forms against the clear blue sky is grand in the extreme.

Tourists coming northward from San Francisco have the choice of two routes and two modes of travel. They may either take one of the fine steamers of the Oregon Railway and Navigation Company, sailing every five days, and performing the voyage in from sixty to seventy-two hours, or they may travel overland by the Oregon & California Railroad, a line that traverses not only the most fruitful plains, but also the most beautiful valleys, of this rich State.

For the benefit of such travelers, and also in view of the possibility of there being those who, both coming and returning by the Northern Pacific Railroad, would like to visit the garden of Oregon, and, if possible, obtain a glimpse of Mount Shasta, it may not be out of place to give a brief description of the line extending southward from Portland to the southern boundary of the State.

For upward of one hundred miles our route lies along the Willamette valley. This is the largest valley in the State, being 150 miles in length, with an average width of fifty miles. Inclosed on the east side by the Cascade Mountains, and on the west by the Coast Range, it contains an area of about four and one-half million acres of rich and beautiful land. Some of the pleasantest towns in the Northwest are to be found in this valley.

First comes Oregon City, sixteen miles from Portland; this is the oldest



FLOATING FISH WHEEL, ON THE COLUMBIA RIVER, OREGON.

town in Oregon. It is situated just below the beautiful falls of the Willamette, amid highly picturesque scenery. Its chief interest for the tourist centres in the falls, which represent a force of over a million horse power, or about eight times that of the Falls of St. Anthony. They may be seen a few hundred yards south of the station, on the west side of the track. Hitherto there has been seen no considerable extent of fertile country; but in Barlow's prairie there appears a fine tract of agricultural land inclosed by tributaries of the Willamette. Others succeed it, and soon good homesteads, surrounded by shade trees and orchards, are seen in every direction. The next town of importance is Salem, the State capital, beautifully situated on the sloping banks of the river. The capitol, and other State buildings, may be seen from the train; and the entire city, with its broad streets and fine oak groves, presents a pleasing appearance.

The twenty-eight miles intervening between Salem and Albany afford some fine views of the Cascade Range, Mount Hood being visible at a distance of

seventy miles, and the nearer southern peaks in still bolder outline. Eugene City, 123 miles from Portland, is also charmingly situated and finely laid out on the edge of a broad, rich prairie overlooked by a ridge of low hills. Its geographical position, at the head of navigation, commands for it the trade of a large section of country. It is also the seat of the State University, and is otherwise an educational centre of great importance.

In the course of the next seventy-four miles the railroad ascends about 2,000 feet to Roseburg, the judicial seat of Douglas county, traversed by another of the famous valleys of Oregon, that of the Umpqua. This was formerly a great stock country; but its pastures have gradually disappeared before the plow, and cattle have given way to grain. It is, moreover, a fine fruit growing region. The tourist is now approaching those intricate valleys which have made this line of railway from Roseburg to its terminus at Ashland at once so costly and so picturesque.

Cow Creek Cañon, so winding that thirty-five miles of track had to be laid to attain twelve miles of actual distance, abounds with wild and beautiful scenery. From the valley of the Umpqua, the railroad passes into that of the Rogue river, in Josephine county. This county is equally famed for its natural beauty, its healthful climate and the wonderful productiveness of its soil. Grains, fruits and vegetables of every description, yield prodigiously, and their quality is not to be surpassed.

The great attractions of the county for the tourist are the two limestone caves situated thirty miles south of Grant's Pass, and fifteen miles east of Kerbyville. There is said to be a good wagon road from the latter place to within five miles of these caves, and arrangements are in progress for the early completion of the road. According to an official publication of the county, there is another route, *viâ* Williams Creek, by wagon road, to within eight miles of the caves, and thence, by a mountain trail, on horseback. The scenery along this route is stated to be grand beyond description, embracing many of the lovely valleys of this charming county, and, in the distance, the snow-capped mountains of the Cascade Range, terminating in the tremendous peak of Mount Shasta. The caves themselves consist each of a series of chambers, adorned with beautiful stalactites of prismatic colors, and other curious and delicate formations, presenting exquisite patterns, and sparkling with the lustre of diamonds.

At Ashland, 341 miles from Portland, the tourist arrives at the southern terminus of the road. Connection is made with the California and Oregon Railroad, at Delta, California, by stage. This is an exceedingly enjoyable stage ride, the first twenty miles of the journey being over the Siskiyou Mountains, from whose summits the long Sierra Nevada and Cascade Range can be traced for nearly 200 miles.

No tourist should return East without first taking a trip down the

LOWER COLUMBIA

to Astoria, that city of most interesting historical associations, and no little actual

importance in these stirring days of trade and manufactures. Admirably appointed steamers, making fast time, run daily between Portland and Astoria. The trip need not, therefore, occupy more than two days. The distance from Portland to the point at which the Willamette discharges itself into the Columbia, is twelve miles, in the course of which opportunity is afforded for observing the progress being made by the city in its manufacturing and other enterprises. The busy wharves are also passed, and the stately ships riding at anchor.

After the first few miles of the Columbia the tourist may be surprised to find

MOUNT TACOMA.

that the scenery of the lower river is far from being tame or monotonous. The river itself winds considerably for so great a body of water ; the forest, too, is luxuriant, and the hillsides are covered with heavy fir ; numerous islands occur at intervals, wooded and exceedingly pretty. Where the river has worked its way through the Coast Mountains, the scenery, though not so abrupt, stern or impressive as that of the middle Columbia, presents many fine effects, the lofty walls of the river being surmounted by hills of considerable altitude.

Not far from Columbia City, on the north or Washington bank of the stream, is an island rock known as Mount Coffin, and formerly an Indian place of sepulture. Here the tribes deposited the bodies of their noted chiefs and

warriors. In his canoe, previously rendered useless, and with his bow and arrows, the dead hero was here laid to rest.

After passing Kalama, the tourist comes upon some of the great canning establishments, which before long are passed at such short intervals that they seem to line the north bank, on which most of them are situated.

The fisheries of the Columbia river are almost as famous as its scenery. The canning industry, which was first established in 1866, has within the last few years attained great importance. Producing the first year some 4,000 cases, representing, at the high price they commanded, $16 per case, a total value of $64,000, it has steadily increased its product, until now it has reached upward of half a million cases. The catch of 1885, which was 524,530 cases, fell short of that of 1884 by 132,000 cases, in consequence of the markets of the world being temporarily overstocked. It is remarkable that the supply should at all exceed the demand, when the gigantic extent of the industry is taken into consideration. The great perfection to which the methods employed in capturing the salmon have been brought, is probably accountable for the recent glut in the market. Among the most effective contrivances for the purpose, is the floating fish-wheel, by means of which the fish are literally scooped up out of the water in shoals. The industry gives employment to 1,500 boats, 3,000 fishermen, and 1,000 factory hands, the latter principally Chinese. The canning season is from April 1st to July 31st, when the lower Columbia is alive with fishing boats, and the canneries are in full operation.

As we approach Astoria, the river widens out into a broad estuary, some seven miles across. Here is Tongue Point, a bold headland running out into the river from the Oregon shore.

In a beautiful bay between this point and Point Adams, is Astoria, built partly on piles, and partly on the shelving hills. For the story of its early history, of the arrival of John Jacob Astor's trading ship, "Tonquin," and of its subsequent British occupancy, the reader is referred to Washington Irving's delightful volume. It is sufficient to say that it is to-day an exceedingly interesting city to visit, not more on account of its being the oldest British settlement in the Northwest, and the central figure in the salmon fishing of the Columbia river, than for the novelty of its construction.

Its busy wharves and abundant shipping proclaim it a seaport of considerable importance, requiring only a railroad or the removal of the barriers to the navigation of the middle Columbia, to make it a great city.

Opposite Point Adams is Cape Hancock, formerly known as Cape Disappointment. On the sea-coast, both on the Washington side, north of Cape Hancock, and on the Oregon side, south of Point Adams, are various summer resorts attracting crowds of visitors during the season. On the Washington shore is Ilwaco, beautifully situated on the north shore of Baker's Bay, with a long, crescent-shaped beach of fine, white sand sloping to the water, and heavily wooded hills in the rear. This growing place, with its hotels, stores, church and school house, is rapidly growing in popularity. Steamers meet the

Portland boat at Astoria, where passengers are transferred without inconvenience or delay. They call, both going and returning, at Cape Hancock, affording tourists an opportunity of visiting Fort Canby, and the great light-house, from which there is one of the most extensive and magnificent views on the entire Pacific coast. On the Oregon shore of the ocean are Clatsop Beach, where there are good hotel accommodations and excellent hunting and fishing, and a popular resort known as Seaside, boasting a multitude of attractions, including a fine ocean beach and a trout creek. Should the tourist be unable to make a long stay at any of these places, he ought at least to pay them a brief visit, if only to cross the great bar of the river, and to see where its mighty flood discharges itself into the ocean at the rate of 1,000,000 gallons per second.

The climate of this section is exceedingly humid; but its summers are delightful. Its rainfall is mostly in winter, when it is both heavy and continuous. It is said, that, if a barrel, with the two ends taken out, be placed upon its side with the bung-hole uppermost, the rain will enter by that small aperture faster than it can run out at the two ends. For this story, however, the writer can not vouch, any more than for that of the recent visitor to the National Park, who is said to have caught, in one of the lakes of that remarkable region, a fish so large that, upon his dragging it ashore, the water of the lake fell six inches.

TO PUGET SOUND.

The tourist has now become more or less familiar with the natural features and resources of that great country lying between the Snake river and the Pacific Ocean, and between the Columbia river and the Siskiyou Mountains.

There remains only Western Washington, with its extensive forests, its rich coal mines, its hop gardens, and its far-famed inland sea, on which he is to embark on his voyage to the great land of the far North. The Pacific division of the Northern Pacific Railroad follows the Willamette river from Portland to its confluence with the Columbia, and the latter river from that point to Kalama, where trains are conveyed across the river by the finest transfer boat in the world, built expressly for the railroad company, and constructed to carry thirty cars at one time. From Kalama the track strikes almost directly northward for Puget Sound, passing through long stretches of dense forest, but also intersecting a tract of country containing a larger area of fertile agricultural land than is contained in any other county in Western Washington.

The chief towns of this region are Chehalis and Centralia, and they give evidence of thrift and prosperity. But the attention of the tourist as he travels onward is largely occupied with the magnificent peaks of the Cascade Range, whose forms of dazzling whiteness constitute, with their background of deepest blue and the dark forests which clothe their base, a picture of marvelous beauty. For more than one hundred miles after we leave Portland, there looms up behind us the graceful contour of Mount Hood, while to the east are seen at intervals the majestic forms of Mount St. Helens and Mount Adams.

But the grandest scene of all is yet to come. After leaving Tenino, there

is a revelation of almost unequaled grandeur in the view of Mount Tacoma, the loftiest peak of the entire range. If Mount Hood can claim to be considered, as is generally admitted, the most graceful and beautiful mountain on the Pacific coast, Mount Tacoma can certainly claim to be the most majestic and sublime. Towering 14,444 feet above sea-level, and thus exceeding by more than 3,000 feet the height of any other mountain in Washington or Oregon, it seems to rear its massive head close to the very battlements of heaven. No other mountain, even in the Yellowstone National Park or in the main range of the Rockies, will have produced so great an impression upon the traveler as will the mighty Tacoma. As he gazes at its majestic form, he is inclined to doubt whether there is in the whole world one that could establish a better claim to

universal sovereignty. In lines that will live as long as the English language itself, Byron declared Mont Blanc the monarch of mountains. But Byron never saw the matchless Tacoma. It, too, has its throne of rocks, its diadem of snow, and, though less frequently than Mont Blanc, its robe of clouds, an adjunct of doubtful advantage except in the exigencies of versification.

Mount Tacoma has, embedded in its mighty bosom, no fewer than fifteen glaciers, three of which have been rendered accessible to visitors. Comparing them with the glaciers of the Alps, Senator Edmunds, of Vermont, declares that the finest effects he witnessed during the course of a long tour in Switzerland, fell far short of what he saw on his visit to Mount Tacoma. At the great hotel, at Tacoma City, guides and camping outfits are always obtainable. Excursion

parties are frequently made up during the summer season, the trip being entirely free from difficulty or danger, even to ladies.

It is at the city of Tacoma that the tourist first looks over the blue waters of Puget Sound. This is the western terminus of the Northern Pacific Railroad. Occupying a commanding position upon a high plateau overlooking Admiralty Inlet, Tacoma has an excellent harbor, capable of receiving the largest ocean-going vessels. It has also some fine public buildings, among them being the Anna Wright Seminary for girls, a monument of the beneficence of Mr. C. B. Wright, of Philadelphia. Its luxuriously furnished hotel, the Tacoma, erected at a cost of $200,000, occupies one of the finest sites in the world, overlooking, as it does, the picturesque shores of the bay, and commanding a magnificent view of the imperial mountain.

A few miles northward is Seattle, also with an excellent harbor, and the promise of becoming a city of great importance, an extensive section of rich country being naturally tributary to it.

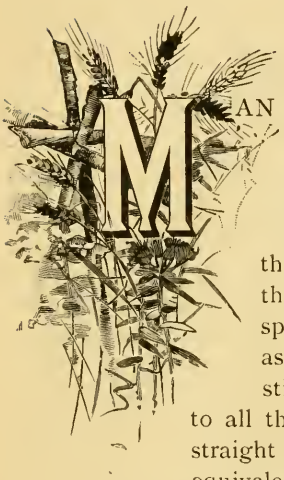
There is no more delightful climate than that of Puget Sound. The summers are cool, the maximum temperature at Tacoma in the summer of 1884 being eighty-nine degrees, and in that of 1885, eighty-five degrees only.

The Cascade division of the railroad, extending eastward from Tacoma, is developing a very rich bituminous coal country, and great quantities of the mineral are being shipped from Tacoma, where immense bunkers have been erected to facilitate its exportation. This line also reaches the fine hop growing country of the Puyallup valley, whose product has steadily risen in Eastern markets, until now it commands as high a price as that of the State of New York.

But never was the tourist less disposed than now to concern himself with agricultural or commercial statistics. With eager expectation, impatient of delay, he is hastening toward that veritable Wonderland of the World that constitutes the Mecca of his pilgrimage. He is about to enter upon the final stage of his long journey, in that far-famed Inland Passage, whose incomparable scenery, extending in one unbroken chain for more than a thousand miles, alone surpasses those stupendous works of Nature upon which he has so recently gazed.

JOHN HYDE.

Alaska and the Inland Passage.



AN travels for business and pleasure. The former can be easily described, by a slight interpolation in a well-known mathematical definition, as "the shortest distance and quickest time between two points." The latter bears to this mathematical rectilinear exactness the relation of the curves,—Hogarth's "line of beauty," the rotund circle and graceful sweep of the Archimedean spiral, and bends of beauty beyond computation; and, as any of these are more pleasing to the eye than the stiff straight line, so any tourist's jaunt is more pleasing to all the senses than the business man's travels. But, as all straight lines are alike, and all curves are different, so are their equivalents in travel, to which we have alluded. One tourist, as a Nimrod, dons his hunting shirt and high-topped boots, and, seeking the solemn recesses of the Rockies, slays the grizzly and mountain lion, and thus has his "good time;" another drives through the grand old gorges of the Yellowstone Park, and the deep impressions left by a lofty nature are his ample rewards; and yet again, where physical exertion is to be avoided by delicate ones or those averse to its peculiarities, one may float down the distant Columbia, with its colossal contours, and, without even lifting a finger to aid one's progress, view as vast and stupendous scenery as the world can produce. Thus each place suits each varying disposition, from the most roystering "roughing it," developing the muscles in mighty knots, to where the most ponderous panorama of nature may be enjoyed from a moving mansion, as it were. Could we conceive a place where all these advantages would be united into one, or where one after the other might be indulged at pleasure, we would certainly have a tourists' paradise, an ever-to-be-sought and never-to-be-forgotten nook of creation. Such a tour is to be encountered on "the inland passage to Alaska," as it is called by those knowing it best.

In this rough, rocky region, Nature has been prodigal of both land and water,—making the former high and picturesque, and the latter deep and navigable, and running in all directions through the other, apparently for the

purpose that it might be easily viewed. From the northwest corner of Washington Territory, through all of the coast line of British Columbia, and along Alaska's shores to the long-cast shadows of Mount St. Elias, stretches for nearly two thousand miles a picturesque panorama that seems as if the Yellowstone, the Yosemite, Colorado, and Switzerland and the Alps, were passing in review before the spectator; and, when the greatest northing is gained, Greenland and Norway have added their glacier-crowned and iceberg-bearing vistas to the view. It looks as if the Yellowstone National Park had sunk into the sea until the valleys were waterways, and the feet of the high mountains had been converted into shores. A grand salt-water river it is that stretches from Puget Sound, itself a beautiful sheet of water, to our distant colony of Alaska, a good round thousand miles, and whose waters are as quiet as an Alpine lake, even though a fierce gale rage on the broad Pacific outside.

Beyond the parallel of Sitka, though the grand scenery may be no more imposing than that through which the tourist will have passed in coming from Washington Territory, he will find some of the curiosities of nature which are to be found only in the dreaded frigid zones,—icebergs and glaciers. Before the waters of Northwestern Washington Territory are out of sight, great patches of snow are to be seen on the highest of the grand mountains bordering the inland passage. These little white blotches in the northern gullies become larger and larger as the excursion steamer wends her way northward, until the loftiest peaks are crowned with snow. Then, across connecting ridges, they join their white mantles; and, in a few more miles, the blue ice of glaciers peeps from out the lower edges of the deep snow. Lower and lower they descend as the steamer crawls northward, until the upper parts of the passage are essayed, when they have come to the ocean's level, and, plunging into the sea, snap off at intervals, and float away as icebergs, some of them higher than the masts of the large, commodious steamers that bear tourists to this fairy-land of the frigid zones, if one can be allowed such an expression. Glacier Bay, which the excursion steamers visit on their summer trips, has a great number of these frozen rivers of ice debouching into it; and its clear, quiet waters, reflecting the Alpine scenery of its shores, are ruffled only by the breaking of the icebergs from the terminal fronts of the glacier, that send waves across its whole breadth, and with a noise like the firing of a sea-coast cannon. Muir Glacier is the greatest of this grand group, and surpasses anything nearer than the polar zones themselves. There is no use in going into mathematical measurements,—its two and three hundred feet in height and its breadth of several miles; for they but feebly represent its grandeur, the deep impressions that figures can not measure when viewing this frozen Niagara of the North. Not until the blue Adriatic has pierced its way into the heart of the high Alps, or some ocean inlet has invaded the valleys of the vast Yellowstone Park, will we ever have an equivalent to this display of Nature's noblest efforts in scenic effects. Were the other scenery as monotonous as the ceaseless plains, a visit to the Alaskan glaciers and icebergs would well repay any one's time and effort; but,

when the tourist travels through the greatest Wonderland of the wide West to reach these curious sights, he or she will be paid over and over tenfold.

So far everything may be seen from the decks of an elegant steamer; but, should the tourist want a little "roughing it," let him stop over in Glacier Bay, from one steamer's visit to another, two weeks to a month apart, and clamber over the glaciers and row around among the icebergs to his heart's content, and until he almost imagines he is an arctic explorer. He will descend from the tumbled surface of the frozen seas of ice on the glacier's surface, only to wade through grass up to his waist, that waves in the light winds like the pretty pampas fields of South America. In these fields of grasses he may pitch his tent, which, with a cook stove and a month's rations for each person, is all that is needed, beyond the baggage of the other tourists. Hunting is found in the mountains back of the bay, fish in the waters, and small game in the woods near by.

Or, if longer and rougher jaunts are wanted, ascend the Lynn Channel, and then the Chilkat, or Chilkoot, Inlet, hiring two or three Indians to carry one's camping effects on their backs to the lakes at the source of the great Yukon river of the British Northwest Territory and Alaska,—the third river of America. Going by the Chilkoot trail, over the Alaskan coast range of mountains, which will furnish Alpine climbing enough to suit the most eager, on snow and glacier ice, one comes to a series of lakes aggregating 150 miles in extent; and along these he may paddle and return, shooting an occasional brown or black bear, moose, caribou or mountain goat, while aquatic life is everywhere on these pretty Alpine lakes.

Throughout the whole inland passage, one is passing now and then some Indian village, of more or less imposing appearance and numbers. In Alaska they all belong to a single great tribe, the T'linkit, bound together by a common language, but by no stronger ties, for each village, or cluster of villages, makes a sub-tribe, having no sympathies with the other, and they often war against one another.

It is not often that one would want to call a tourist's attention to an Indian village, for the average encampment or habitation of the "noble red man" is not the most attractive sight or study; but, in the T'linkit towns, we have no such hesitation, for, in the curiosities to be seen in their houses and surroundings, they are certainly one of the strangest people on earth. They are the artistic savages of the world. In front of each log house, and often rearing its head much higher than it by two or three fold, are one or two posts, called "totem poles," which are merely logs on end; but, on the seaward face, the savage sculptor has exhausted all the resources of his barbaric imagination in cutting in hideous faces and figures, that, with a hundred or so such terrible "totems" in front of a village, makes one think of some nightmare of his childish days. The houses, too, are carved inside and out. Every utensil they have is sculptured deep with diabolical but well executed designs, and their spoons of mountain sheep and goat horn are marvels of savage work. All

these are for sale to tourists, and every excursion steamer brings numbers of these romantic remembrances of a yet more romantic journey back to civilization.

But the inland passage to Alaska is not the only grand and picturesque part of that great territory visited by the excursion steamers ; for beyond and as far as Mount St. Elias, they often sail to this the greatest cluster of high mountains on the Western Continent,—Lituya Peak, 10,000 feet high ; and Fairweather and Crillon, a third taller ; then beyond, Cook and Vancouver cluster near sublime St. Elias, nearly 20,000 feet above the ocean that thunders at its base, and whose jagged top may be seen a hundred and fifty miles to sea. How disappointing are the Colorado peaks of 12,000 and 14,000 feet to one, for the simple reason that they spring from a plain already 6,000 to 8,000 feet above sea-level, and seem, as they are, but high hills on a high plateau. How like pygmies they appear to Hood, Tacoma, Shasta, and others not so high above the ocean base line, but whose nearly every foot above sea-level is in mountain slope. How grand, then, must be hoary-headed St. Elias, whose waist is the waters of the wide sea, and whose 20,000 feet above sea-level springs from the Pacific Ocean, from whose calm waters we view its majestic height.

But let us commence at the starting point of our journey, and take our readers step by step over the whole route.

For many years the people of our great Northwest country, Oregon, Washington and Idaho Territories, have spoken familiarly of "the Sound" as one of their great geographical features,—in much the same way as the people of Southern Connecticut or Long Island speak of "the Sound,"—referring thereby to Puget Sound, that cuts deep into the northwestern corner of Washington Territory. Many have visited it, and sailed on its beautiful waters ; beautiful enough in themselves or their own immediate surroundings, but thrice grand and gorgeous in their silver framing of snow-clad peaks and mountain ranges, surrounding them on all sides. The long, narrow, picturesque sound, that looked not unlike a Greenland fjord, or close-walled bay at the mouth of some grand river,—one of those bays so slowly converging that a person can hardly define where it ceases and the river commences,—was considered one of the most beautiful and scenic places of the Northwest ; and its people delighted to show it to strangers, with its enhancing surroundings, reaching from the prettily situated capital of the Territory, Olympia, at the head of "the sound," to where the broad Juan de Fuca Strait leads to the great Pacific Sea. Then Alaska was known only as Russian America, when it was spoken of at all, so seldom was it heard, and seemed to be as far away from the United States on that side of the continent, and as little thought of, as Greenland or Iceland is to-day with our people of the Atlantic coast. An occasional Hudson's Bay Company trading boat steamed out of Victoria harbor, and disappeared northward, crawling through a maze of intricate inland channels and Alpine-like waterways to some distant and seemingly half-mythical trading post of that lonesome land ; but, as to anything definite as to where she was going, as little

was known by the people as if an arctic expedition was leaving the harbor of New York or Boston, and not one hundredth of the *furor* was made about the departure, if, in fact, any notice was taken of it at all. With the accession of Alaska, through the efforts of Secretary Seward and Senator Sumner, the discovery of the Cassiar mines, in British Columbia, but which must be reached through Alaska, and a few other minor incentives, set many people to looking northward ; they then found that they could continue their trips on a long inland salt-water river, of which the well-known Puget Sound was but a small part,—hardly the equivalent of Narragansett Bay taken from Long Island Sound, or Green Bay from Lake Michigan. Not that these were the first explorations and discoveries of importance in the inland passage and its surrounding woods and waters, by any manner of means. Cook and Clerke, as early as 1776 ; Dixon, from 1785 to 1788 ; Langsdorff, in 1803–8 ; La Perouse, in 1785–88 ; Lisianski, from 1803 to 1806 ; Meares, of the Royal navy, from 1788 to 1789 ; and especially Vancouver, from 1790 to 1795,—had all peeped into this part of the country, and many of the explorations and surveys were of the most extended nature ; but, at about the time of which I speak, the knowledge of the inland passage to the bulk of the people, even in these parts so near to it, was nearly as musty as the old volumes on the library shelves that gave the most information. In fact, but little knowledge or interest was to be found regarding these parts. Their history of development from that embryonic state where everything told is regarded as bordering on the mythical, to where a line of ocean steamers visits them with crowded passenger lists, is the usual history of such developments.

The inland passage to Alaska may be said to practically extend from Tacoma, in Washington Territory, at the head of Puget Sound, to Chilkat, Alaska, at the head of Lynn Channel, a distance of nearly 1,100 miles, where the tourist taking a sea voyage has high shores in close proximity on either side of him, except a few places here and there, where a short communication with the ocean outside is to be had. But this "inland passage," so called, is not the only one leading between the points named. It is, rather, a Broadway in New York City, a Pennsylvania avenue in Washington, State street in Chicago,—i. e., the main way ; but every few miles a vessel could turn off down another passage as readily as a pedestrian or vehicle could down a side street, and, continuing a short way, return to the main thoroughfare again. Probably all the channels and straits and sounds and inlets in this part of Alaska, British Columbia and Washington Territory, susceptible of navigation by fair-sized ocean and river steamers, and all of them connecting with each other in a perfect network of waterways, would, if placed end to end, reach from a quarter to a third of the way around the world. Many of them are so illy charted—or not charted at all—that no craft of value would trust herself to follow their courses, while some of the smaller ways, but probably none the less picturesque, have yet to bear the first white man on their bosom. The most picturesque of all the ways through this intricacy of picturesque channels has

been selected, carefully surveyed, and experienced pilots conduct the vessels to and from Alaska on its waters. The whole length of the passage is heavily timbered with various kinds of pine, fir, hemlock, cedar and spruce. Here and there avalanches from the mountain tops have swept through the dense timber, like a sickle through so much grain; and, although in a few years the growth is restored, yet the varying shades of green in the old and new growth of trees, running in perpendicular stripes up the steep hillsides, plainly show the ancient and recent devastations. Prettily situated Indian villages dot the narrow, shelving shores at rare intervals along the passage; and, when these nomads of the Northwest are seen, which is not infrequent, the chances are more than likely that it will be in a canoe, where they spend two-thirds of their out-of-door life.

Says the "American Cyclopædia," speaking of this interesting part of Washington Territory, the southern part of the inland passage: "Washington Territory possesses a great multitude of harbors, perhaps more than any other country of equal extent on the globe. Puget Sound, which has an average width of two miles, never less than one nor more than four, and a depth never less than eight fathoms, runs 100 miles inland in a southward direction from the Straits of Fuca; and Hood's Canal, twelve miles further west, with half the width, runs in the same general direction about 60 miles. These two great estuaries, or arms of tidewater, have depth sufficient for the largest vessels, and numerous bends and corners where the most perfect protection may be found against the winds." Captain Wilkes, in the report of his famous exploring expedition, writes of Puget Sound: "I venture nothing in saying there is no country in the world that possesses waters equal to these." The Coast Range and Cascade Range of mountains are plainly visible from the sound. Near the Columbia river the Coast Range is not very high; but west of Hood's Canal it rises, in abrupt, beetling ridges, 7,000 to 9,000 feet high, called the Olympian Mountains, many of the peaks being snow-crowned throughout the year. The Cascade Range fairly bristles with snow-clad peaks from 8,000 to over 14,000 feet in height, and in every direction, almost, may be seen the grandest Alpine scenery in the distance.

Steaming northward through Puget Sound from Tacoma, with Seattle and other towns upon our right, and Port Townsend, the port of entry to the sound, upon our left, we come to Juan de Fuca Strait, which would lead us to the Pacific Ocean were we to follow it out. It is the most southern of all the waterways that connect the great sea with the network of channels inside, and formerly was much used as a part of the route to Alaska or Puget Sound from Portland, Oregon, or San Francisco, California; the steamer putting out to sea for a day if from the former port, and for four or five if from the latter, the passengers having all the discomforts of a sea voyage for that time. Where Magellan sailed over the Pacific Ocean it well deserved the name; but along the rough northern coast the amount of stormy weather increases, and a voyage on this part of the Pacific is not always calculated to impress one with the appro-

priateness of the great ocean's name. The construction of the Northern Pacific Railroad from the Columbia river to Puget Sound has made these sea voyages unnecessary to reach a port on the inland passage; and, unless a person's stomach is built on "nautical lines," so that he really enjoys an ocean trip, he can save this discomfort by a cut across lots on a railroad train. In fact, it must be kept in mind, that, while the trip on the inland passage is an ocean voyage, equal to one from New York City to Havana and return, it is, as far as sea-sickness is concerned, as if the Hudson river was turned around in the opposite direction, and we sailed on its waters from New York to Havana and return; while the inland passage, in its southern part, is as accessible by railroad travel, to the people of the United States and Canada, as any point on the Hudson river. Therefore, broad Juan de Fuca Strait, where the pulsations of the ocean's life outside are even felt to its eastern end, in much diminished waves, however, carries fewer persons than formerly, and especially of that reluctant class who look uncomplainingly at the terrors of the sea, from the basis of dire necessity.

Crossing this strait, which has led to so many controversies as to whether the old Greek from whom it is named actually discovered this beautiful body of water, or only made a lucky guess in publishing to the world a mythical journey of his, we sight and bear down on the beautiful British island of Vancouver, whose metropolis is Victoria, and alongside of whose docks we shall soon be made fast.

Victoria, the city, was built on the site of old Fort Victoria, a Hudson Bay Company trading post of that great British monopoly that held nearly all British America under its control for two hundred years, and, although broken as a monopoly, has yet an influence to assist or retard the development of the country which is incalculable. The Fraser river gold mine excitement in the '50's did much to build up Victoria, and send it forward into the front rank of Pacific coast cities, a position which she has held with varying fortunes, though now, in common with the whole Northwest, once more on the ascending wave.

Cities, like individuals, have their "hobbies," although seldom so prominently marked; and the municipal "hobby" of Victoria is her splendidly constructed roads, leading through the town and far beyond the suburbs, and in which she has no superior on the Pacific coast of North America, and but few in the world. If the steamer remains long enough in the harbor,—and during excursion times in the summer months they always do,—a drive should be taken on the Victoria roads, and especially the one leading to Esquimalt harbor and return, some two or three miles in all. It is but one, however, of the many beautiful drives; but it is only necessary to mention them in a general way for any one who would desire to test them, so readily can all needed information be found on the spot.

In quaint little smoke-stained and dingy-looking stores in out-of-the-way nooks and corners of the streets are to be found the Victorian curiosity shops,

crowded with relics of the fast-disappearing Indian tribes that once formed a much denser population in this part of the country than at present. Pretty little mats and baskets are made from the sea-grass, dyed with the juices from berries and other natural dyes, and sold for the merest trifles. Curiously carved steatite houses, in miniature imitation of the Indian dwellings, and "totem poles" made by the Hydah or Haïda Indians, are to be seen for sale. Sometimes they carve plaques with spread-eagles and other fanciful designs upon them; rude but serviceable mats from the inner bark of the cedar tree, and all the known—and unknown—knick-knacks that can come from the barbaric ingenuity of Indian art, and which would require a pamphlet larger than the one in the reader's hands to chronicle half. This is the beginning of such curious wares that will be temptingly displayed before the tourist at every town and stopping place on the route, and from which may be selected such mementoes of the journey as will please the individual fancy.

Says a writer in the *Overland Monthly*, the *Century Magazine* of the Pacific coast: "Victoria, in a rock-bound and land-protected cove, is the most attractive and the largest city on Vancouver's Island. During the days of the Fraser river excitement, Victoria was a much more energetic city than it is to-day. There were exciting times there then, and, because of the great expectations which everybody indulged in, land was bid up to an enormously high figure, and the town's prospects were considered wonderfully brilliant. But the Fraser was a fraud, comparatively, and its mines were quickly exhausted, so that Victoria received a setback, from which it is only just recovering. It is a picturesque town, thoroughly English, staid and conservative, and its location is an enviable one. In the distance rise the blue-hued heights of the Vancouver ranges, and nearer at hand lie the waters of Fuca Straits; beyond which there can be seen the snowy peaks of the Washington Territory mountains. Rounding the long point of land which juts out into the sea to form Victoria harbor, the town lay all revealed to us at last. In one direction were red painted shops set upon a high bluff overlooking the bay, and eastward there were green fields and trimly built cottages.

"'Coming ashore?' we were asked at length.

"'Not to-day,' the artist said.

"'Then, don't judge Victoria until you see the place,' came the word from the dock.

"We promised, and said that when homeward bound we would make a call."

Returning, the narrator continues, "On the wharf at Victoria stood our friend of a month ago.

"'Coming ashore?' he said, when he saw us.

"'Yes.'

"'Good, we can show you a pretty town. Disappointed in Alaska?'

"'No; it's the grandest country for scenery I—' began the artist.

"'Yes, yes, I know,' said our friend, interrupting him. 'Big glaciers, fine sailing, curious sights, no sea-sickness. Same old story; hear it every trip.'

"Victoria is picturesque in every detail," continues the narrator. "The land faces a land-locked bay, and behind the place stretch dense forests, through which roadways extend to the various suburbs. During our stay the frosts of early fall began to color the leaves, and at night the air grew sharp and chill. But still the air was clear, and down in the harbor white-winged yachts still moved over the bluish waters."

Vancouver Island, which forms the outlying barrier to, or seaward side of, the inland passage from Juan de Fuca Strait to Queen Charlotte Sound, is one of the largest islands in that vast archipelago which forms the passage, and is the largest under British dominion. It was called Quadra Island by the Spaniards, who held it by descent from Mexico (then a Spanish colony) until the latter part of the eighteenth century, when Vancouver, of the Royal navy, was sent from England to receive its surrender from the Spanish; it having been ordered by the home government at Madrid,—which he did from the Castilian governor, Quadra. Vancouver called it Quadra and Vancouver's Island; but the Spanish title has slowly disappeared under British rule. Vancouver pushed his discoveries from here to Cook's Inlet during his two or three years' cruise on this coast, and many of the names in the inland passage and adjacent lands and waters are due to his explorations made nearly a hundred years ago.

Leaving Victoria and its picturesque surroundings behind us, we swing in a huge circle around the southeastern coast of Vancouver Island, until we are pointed northward once more.

Strictly speaking, "the inland passage to Alaska, as defined by nautical men, now begins, Puget Sound only belonging to it in a geographical sense, but as similar thereto as 'peas in a pod.'" We shortly after pass through a congerie of pretty islands, like the Thousand Islands of the St Lawrence on a greatly magnified scale, when we come to the Gulf of Georgia, one of the widest portions of the inland passage. The islands we have left to the right (although it may change by the pilot not taking the usual route, so many are they to choose from) are the San Juan Islands, of far more importance than one would believe, looking at the unpopulated shores; at least, they were so in 1856, when the United States and Great Britain came very near coming to national blows about their possession. The matter was finally left to arbitration in the hands of the Emperor of Brazil, and then transferred to the present Emperor of Germany, who awarded them to the United States. The British troops then withdrew, a post of them having been on one end of the large island, with an American post on the other.

As we steam through the Gulf of Georgia we leave the highest point (Point Roberts) of the United States off to our right, in the distance, on the forty-ninth parallel.

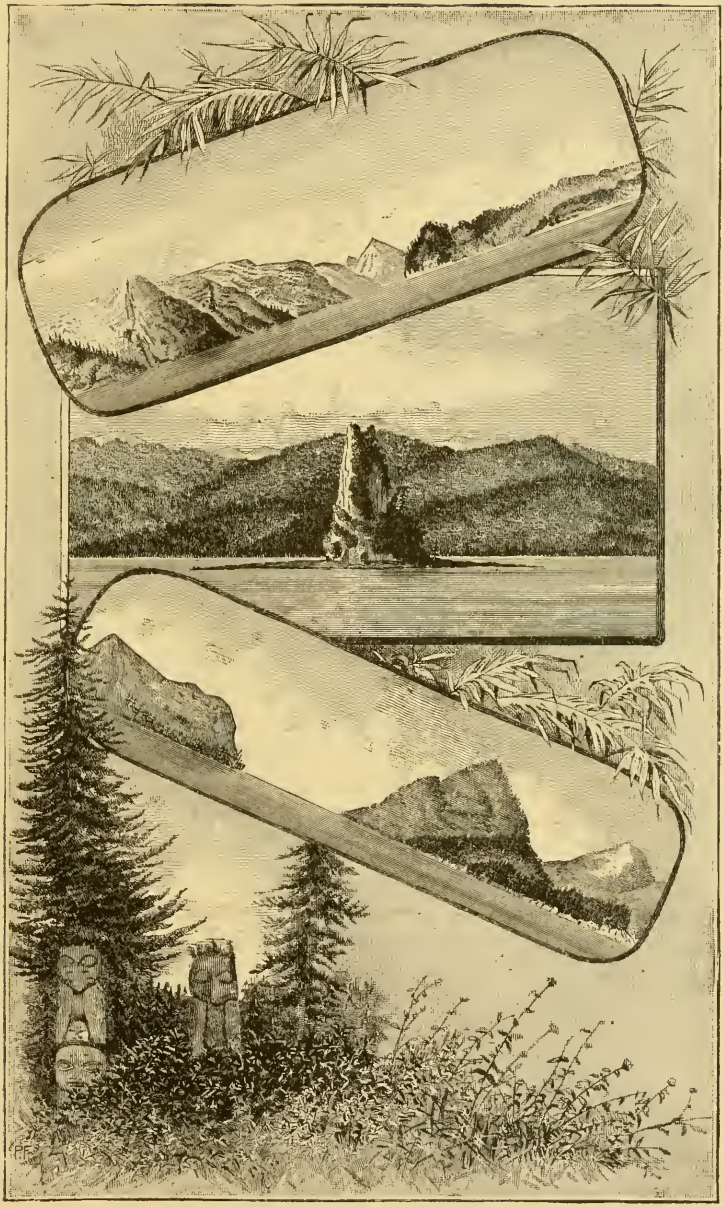
Some forty or fifty miles farther on, and we enter the first typical waters of the inland passage,—Discovery Passage,—a narrow waterway between high, mountainous banks; a great salt-water, river-like channel, about a mile in breadth, and twenty-three and a half miles long by the British Admiralty

charts. A huge yellow bluff, projecting into the sea, greets the eye as the passage is approached, and the great, wide channel to the east is the one the tourist has selected as a matter of course for the steamer to pursue; but she agreeably disappoints him, and enters the narrow, picturesque way. This Discovery Passage is a Yankee "find," having first been entered by a Boston sloop, the "Washington," in 1789. The broad right-hand passage could have been taken, as the land to our right is an island (of which the yellow clay bluff is the southern cape), called Valdez Island after an ancient mariner who visited this part of the world in 1792, in the Spanish galleon "Mexicana." At first one is slightly nonplused at the frequency of Spanish names in these quarters; but, as the early history of the country is closely searched, the conclusion is forced on one more and more that these old Castilian navigators have not even got their dues, and, where their names once formed an honorable majority, they have slowly disappeared before the constant revisions of the geographers and hydrographers of another people, who have since acquired possession. We will come to many such changes of nomenclature on our interesting trip.

About two miles from the entrance to Discovery Passage we come to the Indian Village of Yaculta, on Valdez Island. It is the first of many we will see before we return to Victoria again, and, like most of them, it is on one of the narrow, level places between the high hills and the deep sea that happens here and there in this Alpine country; or its inhabitants would have to live in the trees on the steep hillsides, or in their canoes on the water. The large river coming in from the Vancouver Island side, some five or six miles from the entrance to the passage, is Campbell river, and is navigable for some distance inland by boats and canoes.

About half way through Discovery Passage we come to the Seymour Narrows, a contracted channel of the passage, about two miles long, and not much over one-fourth the previous width, where the tides rush through with the velocity of the swiftest rivers (said to be nine knots at spring-tides), a current which is so strong that it is generally calculated upon in departing from Victoria so as to reach this point about slack water. In the narrows is a submerged rock, with the pretty-sounding alliterative title of Ripple Rock, on which the United States man-of-war "Saranac" was lost in the summer of 1875. Ripple Rock is now so well marked that it is no longer dangerous to navigation. Northward from the narrows the hills rise in bold gradients, making the change quite noticeable, and more picturesque.

Chatham Point marks the northern entrance to Discovery Passage, and here the tourist apparently sees the inland passage bearing off slightly to the east from this cape, when, with a sudden swerve to the westward, the ship swings around at full right angles to her original course, and enters a channel which a minute before seemed to be but a bay on the west side of the original waterway. The new channel is Johnstone Strait, and is over twice as long as Dis-



SCENES IN THE INLAND PASSAGE.

From Schwatka's "Along Alaska's Great River," Cassell & Co. New York, Publisher

covery Passage, that we have just left ; or, to be more exact, about fifty-five miles in length. The shores are now getting truly mountainous in character, ridges and peaks on the south side bearing snow throughout the summer on their summits, 4,000 to 5,000 feet high, and the pilot will tell you that the waters on which you are sailing correspond in their dimensions, in many places 100 to 150 fathoms of line failing to reach bottom. The rough and rugged islands which we pass to our right, about three or four miles beyond Chatham Point, are the Pender Islands. The high mountains to the left and front are the Prince of Wales range. About fifteen to twenty miles after entering Johnstone Strait, a conspicuous valley is seen on Vancouver Island, the only break in the high mountain range on that side. It is the valley of a stream called Salmon river, named from that delicious fish, which here abound, and in the pursuit of which the Indians have shown this stream to be navigable for canoes for a number of miles inland. A conspicuous conical hill, probably a thousand feet high, rises in the valley and marks it to the traveler. Just beyond Salmon river's mouth, some three miles, the strait widens, another joining it from the north. The mountains to our left are now the New Castle range, Mount Palmerston attaining the height of 5,000 feet. At the northern end of Johnstone Strait we have a number of channels to choose from,—Blackfish Sound, Weynton Passage, Race Passage and Broughton Strait, the longest of all, and only fifteen miles in length, which we take. All these channels simply indicate that there is a cluster of islands where Johnstone Strait swells out into Queen Charlotte Sound, which we enter as Broughton Strait is left behind, and that as we select between different islands we take a different-named channel. These particular islands are the Malcolm Islands, sometimes confined in its application to the largest island. About half way through the Broughton Strait comes in the Nimpkish river from the Vancouver side. Mount Holdsworth is the high, conical peak we see to the south from here. At the mouth of the river is the Indian village of Cheslakee. It is said that an ascent of this river reveals the most picturesque scenery in lakes and falls, a saying to which all the surroundings in the inland passage itself, at this point, would give the most ample corroboration. Directly north from the river's mouth is Cormorant Island, which we leave to our right; and the bay in its side is Alert Bay, where exist a salmon cannery, an Indian mission, a wharf at which ships can land, and other signs of civilization.

Queen Charlotte Sound is one of the few openings to the Pacific Ocean. It is about fifty miles long, and, in some places, nearly half as wide, and looks like getting out to sea after having passed through the narrow channels just left behind. It was entered and named by Wedgeborough in the summer of 1786 ; so those visitors of 1886 to its grand waters may celebrate its centennial, and drink a toast to Queen Charlotte, the queen of King George III., and queen for fifty-seven years. About nine or ten miles on its waters, and to our left, is Fort Rupert, a Hudson Bay Company's trading post, with a large Indian village clustered around it. Here fruits and vegetables are grown for the local

demand. About half way through Queen Charlotte Sound, and we pass through a narrow channel, twenty-two miles long, named Goletas Channel. Emerging from it, we leave Cape Commerell on our left side, and bid good-bye to Vancouver Island, for this is its northernmost cape. Near the exit from Goletas Channel, but by another passage, now seldom used, is where the United States man-of-war "Suwanee" was wrecked, on a submerged rock, in July, 1869, when the inland passage was not so well known by pilots as it is now. We can now look out to sea toward the Pacific Ocean; but a short journey plunges us into one of the many passages ahead of us, the smallest, or one nearest the mainland, being taken, called Fitzhugh Sound. It was named in 1786 by Captain Hanna, is about forty miles long, and with a width of about three miles. The first island to our left on entering is Calvert Island. About ten miles from its southern cape is an indentation in the island, called Safety Cove or Port Safety, probably a mile deep. It was while delayed in this picturesque little harbor, in 1885, that Mr. Charles Hallock, the well-known author on piscatorial pursuits, penned the following lines, descriptive of the inland passage, which we find in the *American Angler* of September, 1885:

"The mainland is flanked throughout nearly its entire extent by a belt of islands, of which the majority are sea-girt mountains. Of course, throughout this extended coast-line there are many islands of many different phases,—some of them mere rocks, to which the kelps cling for dear life, like stranded sailors in a storm; while others are gently rounded mounds, wooded with fir; and others, still, precipitous cliffs standing breast deep in the waves. Most aptly has this wave-washed region been termed an archipelago of mountains and land-locked seas. Steaming through the labyrinths of straits and channels which seem to have no outlets; straining the neck to scan the tops of snow-capped peaks which rise abruptly from the basin where you ride at anchor; watching the gambols of great whales, thresher-sharks and herds of sea-lions, which seem as if penned up in an aquarium, so completely are they enclosed by the shadowy hills,—one seems, indeed, in a new creation, and watches the strange forms around him with an intensity of interest which almost amounts to awe.

"In this weird region of bottomless depths, there are no sand beaches or gravelly shores. All the margins of mainland and islands drop down plump into inky fathoms of water, and the fall of the tide only exposes the rank yellow weeds which cling to the damp crags and slippery rocks, and the mussels and barnacles which crackle and hiss when the lapping waves recede. * * * * * When the tide sets in, great rafts of algæ, with stems fifty feet long, career along the surface; millions of jelly-fish and anemones crowded as closely as the stars in the firmament; great air-bulbs, with streamers floating like the long hair of female corpses; schools of porpoises and fin-back whale rolling and plunging headlong through the boiling foam; all sorts of marine and Mediterranean fauna pour in a ceaseless surge, like an irresistible army. Hosts of gulls scream overhead, or whiten the ledges, where they squat content or run about feeding.

"Here and there along the almost perpendicular cliffs the outflow of the melting snow in the pockets of the mountains leaps down in dizzy waterfalls from heights that are higher than the Yosemite. From the cañons which divide the foot-hills, cascades pour out into the brine, and all their channels are choked with salmon crowding toward the upper waters. I could catch them with my hands as long as my strength endured, so helpless and infatuated are these creatures of predestination. At the heads of many of these rivulets there are lakes in which dwell salmon trout, spotted with crimson spots as large as a pea; and the rainbow trout, with his iridescent lateral stripe; and his cousin germain, the 'cut-throat trout,' slashed with carmine under the gills. And there is another trout, most familiar to the eye in Eastern waters, and doubly welcome to the sight in this far-off region—the *Salvelinus Canadensis*, or 'sea-trout,' which I have recognized these many years as a separate species. * * * Here he is in his garniture of crimson, blue and gold, just like his up-stream neighbors of New England and the Provinces. * *

"The seas are full of strange species. Here the family *Percidæ* is regnant and supreme among the food fishes. The number of species and varieties is remarkable. Here are the *Embiotocidæ*, or *viviparous* perch, which bring forth their young in litters, like cats or dogs, to the number of eight to forty at a time. There are no less than seventeen known varieties of them. Here, also, are at least fifteen varieties of *Scorpænidæ*, all fine table fish, which are locally known as rock-cod, groupers and snappers, but having no close relations at all to the family of *Gadidæ*. I send herewith the differential characteristics of four of them taken near our present berth, in latitude 51 degrees 30 minutes. The scarlet snapper seems very closely allied to the *Lutjanus Blackfordi* of Eastern Florida and the Gulf of Mexico, from which he could scarcely be distinguished in appearance. The others are all fish of brilliant colors. No. 2 can scarcely be distinguished from the fresh-water bass of the lakes lying west of the Mississippi,—the *Micropterus*,—either in form, fin system or color. At Sitka I found a fish of exactly the same shape, but black as a sea-bass of the Atlantic (*Centropristis atrarius*). No. 4 belongs, I believe, to the family of *Chiridæ*, and is locally known as a sea-trout. * * * These fish take salmon roe, clams, sand-worms, crabs, meat and cut-fish bait. The black bass of Sitka is taken alongshore with a trolling spoon. * * * The other fish were taken chiefly in thirty fathoms of water on the young flood tide.

"Besides these fish, we have taken halibut, two kinds of flounder, skates, dog-fish of several kinds and strange shapes, sharks, sculpins, etc.; some of the sculpins were beautifully marked in blue, red and brown. * * I have had several of the species painted in oil, and will forward them to the Smithsonian, with descriptions."

But let us leave this piscatorial paradise, as painted by one who is an artist in his line, and wend our way through the forty miles of Fitzhugh Sound. Then comes Lama Passage, contracted, winding and picturesque, about fourteen or fifteen miles long. About half way through we pass very near the Indian

village of Bella-Bella, and which is also a Hudson Bay Company trading post. The Bella-Bellas were once a large tribe living in these parts; but the little village, of about twenty Indian houses, that the tourist passes on his left, represents the greater portion of the tribe at present, and gives one a practical and forcible illustration of the disappearance of "the noble red man." A mission residence and a church, with the cattle on the cleared hills, give the place quite a civilized aspect. After Lama Passage comes Seaforth Channel, just as winding and pretty; the swingings to the right and left, in places where the passage is apparently right ahead, increase your respect for the pilot, and you wonder, in all these intricacies, like Goldsmith's village schoolmaster, "how one small head could carry all he knew." At Milbank Sound we look out to sea for a brief half-hour, and then plunge into Finlayson Channel, a typical waterway of the inland passage, like a great river. The sides are very high mountains, densely timbered nearly to the top, where snow exists the year round, forming a base of supplies for the beautiful waterfalls that dash down the precipitous heights, like silvery columns, on a deep green background. It is said that all the little streams of this region swarm with salmon, giving the Indians a most bountiful supply. Then comes Graham Reach, about twenty miles long; then Fraser Reach, of ten miles; and McKay Reach, of seven,—that could all have been given a single name, and much trouble have been saved. A little, irregular sheet of water, called Wright Sound, and Grenville Channel, "as straight as an arrow," gives us nearly fifty miles of rectilinear sailing.

We are now getting far enough north to make the sight of snow a familiar one, and the dense timber is striped with perpendicular windrows, where large avalanches have cut their way through them in the winter, when the snow falls heavily in these parts. Chatham Sound is the last channel we essay in British domain, and a royal old sheet of water it is, with a width of nearly ten miles, and about three or four times as long. After about three hours on its bosom a great channel is opened east and west before us, on which the swells from the broad Pacific enter. This is Dixon Entrance, and the boundary between British Columbia and Alaska beyond, whose blue mountains we see in the distance. The islands still continue; and the number, in this part of Alaska alone, has been estimated at eleven hundred, and this, too, excludes the rocks and islets. Clarence Strait is the main channel as soon as Alaskan waters are entered; but there are others on both sides of it which may be taken. It is a little over a hundred miles long, and somewhat variable in its width. It was named by Vancouver, nearly a hundred years ago, after the Duke of Clarence. From Clarence Strait we enter Stickeen Strait; for most of the steamers call at Wrangell, and this bends us off of our course.

Wrangell is a tumble-down, dilapidated-looking town, in a most beautifully picturesque situation, and the first impression is to make one ashamed of the displays of the human race compared with those of nature. It is the port to the Cassiar mines; or, better speaking, it was, for they have seen their palmiest days, a fact which is quite evident on looking at their dependency, the town of

Wrangell. The Cassiar mines are in British Columbia, and to reach them the Stickeen river, emptying near Wrangell, must be ascended, itself a most picturesque stream, and one well worth visiting if the tourist can catch one of the little boats that yet occasionally depart from Wrangell to ascend the rushing, impetuous river. Says one writer of it, in the Philadelphia *Dispatch:* "The Stickeen is navigable for small steamers to Glenora, one hundred and fifty miles, flowing first in a general westerly direction, through grassy, undulating plains, darkened here and there with patches of evergreens; then, curving southward, and receiving numerous tributaries from the north, it enters the Coast Range, and sweeps across it to the sea through a Yosemite valley more than a hundred miles long, and one to three miles wide at the bottom, and from five thousand to eight thousand feet deep, marvelously beautiful and inspiring from end to end. To the appreciative tourist, sailing up the river through the midst of it all, the cañon, for a distance of one hundred and ten miles, is a gallery of sublime pictures,—an unbroken series of majestic mountains, glaciers, falls, cascades, forests, groves, flowery garden spots, grassy meadows in endless variety of form and composition,—furniture enough for a dozen Yosemites! while, back of the walls, and thousands of feet above them, innumerable peaks and spires and domes of ice and snow tower grandly into the sky. About fifteen miles above the mouth of the river you come to the first of the great glaciers, pouring down through the forest in a shattered ice-cascade nearly to the level of the river. Twelve miles above this point a noble view is opened along the Skoot river cañon—a group of glacier-laden Alps, from ten thousand to twelve thousand feet high. Thirty-five miles above the mouth of the river the most striking object of all comes in sight; this is the lower expansion of the great glacier, measuring about six miles around the 'snout,' pushed boldly forward into the middle of the valley among the trees, while its sources are mostly hidden. It takes its rise in the heart of the range, some thirty or forty miles away. Compared with this, the Swiss *mer de glace* is a small thing. It is called the 'Ice Mountain.' The front of the snout is three hundred feet high, but rises rapidly back for a few miles to a height of about one thousand feet. Seen through gaps in the trees growing on one of its terminal moraines, as one sails slowly along against the current, the marvelous beauty of the chasms and clustered pinnacles shows to fine advantage in the sunshine."

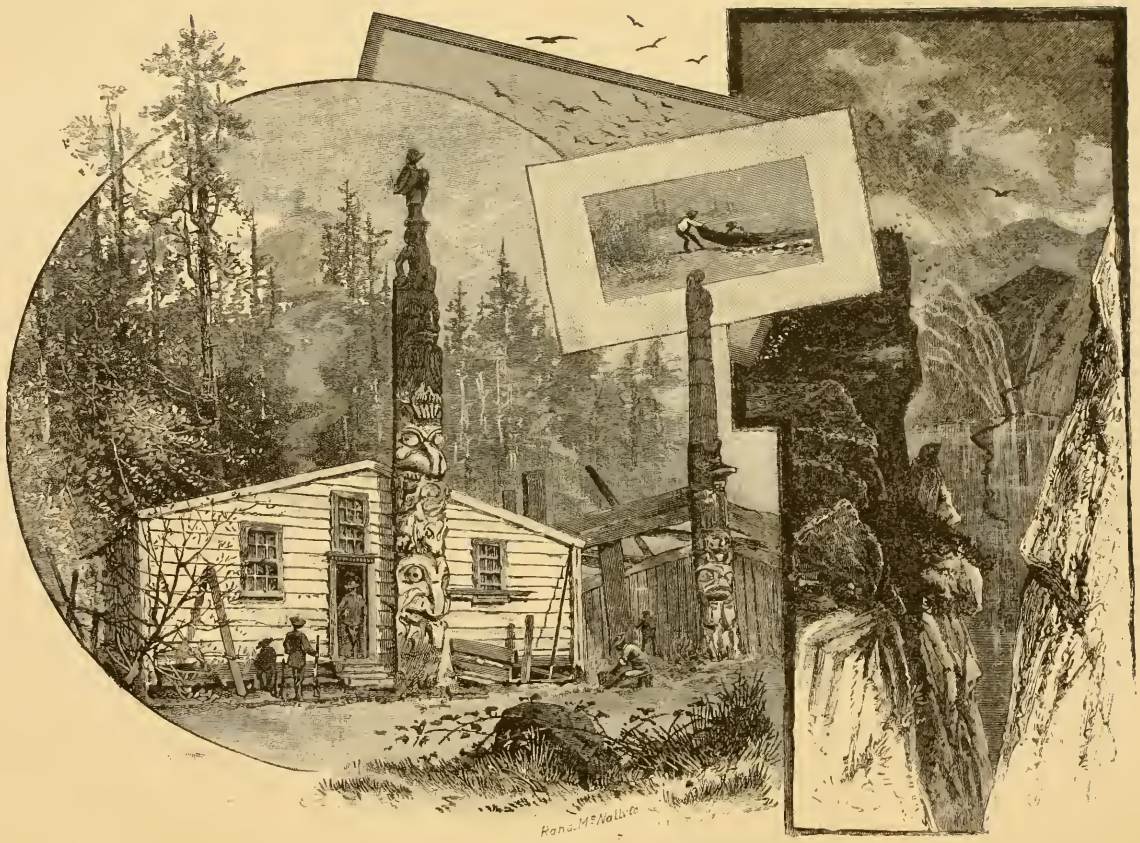
Wrangell's log-cabin backwoods stores are good places to search for Indian relics, the Stickeen Indians living in the vicinity being the most prolific in the manufacture of these savage curios. Leaving Wrangell, a westward-trending strait (Sumner Strait, after Senator Sumner) of forty or fifty miles carries us directly out to the Pacific Ocean; but an hour's run finds us turning into another passage,—Chatham Strait,—one of the largest of the almost innumerable channels of the inland passage, and which points squarely to the north. It is nearly one hundred and fifty miles long, and about five or six miles wide. It was named by Vancouver, about the end of last century, after the then Earl of Chatham, and is a most noble sheet of water.

Formerly the pilots used to go around Cape Ommaney, and put out to sea in order to reach Sitka, although there was a channel leading from Chatham Strait thereto which saved the roughness of a sea voyage. It was shunned, however, by most of them, and, in getting the ominous name of Peril Strait, certain supposed dangers were thought to be lurking in it. Captain Carroll, who has spent half an ordinary lifetime in these waters, and done much toward practically determining their navigability, found that most of the peril was in the name,—at least to ships under his management,—and Peril Straits* are used nearly altogether now, making Sitka, though facing the Pacific Ocean, practically on the inland passage.

Just before entering Peril Straits,—by the way, one of the most charming of the many channels described,—we stop at a little place ensconced in a narrow inlet of Chatham Strait, called Killisnoo. At Killisnoo the Northwest Trading Company, of Portland, Oregon, have erected quite extensive works for the capture and curing of cod-fish, which has made this something of a port, at least for Alaska. There is also a phosphate factory here, where phosphates are made from herring, after the oil is extracted. This company formerly caught whales in this strait; but I understand the enterprise has been partially, or wholly, given up as not paying; or, at least, in proportion to the new enterprises they have more recently opened. Around this part of Admiralty Island are the Kootznahoo Indians, who have been quite a warlike band of savages in the past, but have been quite mollified by an incident in their troubles, which I will give in the language of a correspondent to the New York *Times*, of November 23, 1884:

"The Kootznahoo village, near the fishing station of Killisnoo, was the scene of the latest naval battle and bombardment on the coast, two years ago. A medicine man of the tribe who went out in a whale-boat was killed by the explosion of a bomb harpoon, and the Indians demanded money or a life as an equivalent for their loss. The Killisnoo traders did not respect this Indian law of atonement, and the Indians seized a white man for hostage. Finding that the hostage had only one eye, they declared him *cultus* (bad), and sent word that they must have a whole and sound man, or his equivalent in blankets, to make up for their lost medicine man. They threatened the massacre of the settlement, and word was sent to Sitka for help. Captain Merriman, United States navy, went over with the revenue cutter 'Corwin' and the steamer 'Favorite,' and made a counter demand for blankets as a guarantee for their future peace and quiet. Failing to respond, he carried out his threat of shelling their village, the Indians having improved their hours of delay by removing their canoes, valuables and provisions. Most of the houses were destroyed, and the humbled Indians came to terms, and have been the most penitent and reliable friends of the whites

* The Russian name is Destruction or Pernicious Straits (the reason for which appears further on), and, in its improper translation to Peril Straits, many people supposed the name was given on account of its dangerous navigation.



AN ALASKA INDIAN HOUSE WITH TOTEM POLES.

ever since. They have built their houses now around the Killisnoo settlement; and, although Captain Merriman left the Territory some time ago, they all speak of him as the best of *tyees*, and the settlers say that the naval battle of Killisnoo has made life and property more secure throughout the Territory."

At present the inland passage in the Territory and British Columbia is as safe from Indians as Broadway, in New York City, or State street, Chicago. In no place in the world of which I know, or have ever heard, are the facilities for studying Indian life so good for those who only spend a tourist's jaunt among them. Many people along the far Western railroads will remember seeing here and there a dirty group of assorted Indians, begging for alms, and taking full advantage of all the silver-plated sympathy showered upon them in that metal; for they were parts of the curious scenes to behold. Generally they were a slim delegation from some far-away agency, and a person living in Washington, where the Indian chiefs occasionally visit in their full regalia, would have a better chance to see typical Indians than the tourist, unless he left the road and visited their agencies, a journey of toil and trouble, and less welcome if the agent be a stranger. Alaska is widely different. From its mountainous, Alpine nature, living inland is out of the question; and the Indians seek the few narrow beaches and low points scattered here and there through the inland passage as the places whereon to build their little villages, and these are in as full view to the passing steamer as New York and Brooklyn are to a boat going up or down the East river channel. At rarer intervals more extensive plats of level or rolling land have been found; and at some of these, in proximity to certain places where business pursuits are carried on, white men have erected their little towns; and around these, again, the Indians have clustered their curious cabins in the most friendly way, giving the greatest access to tourists during even the short time that vessels stop at the ports to load and unload their freight. At Wrangell, Sitka, Pyramid Harbor, etc., are to be seen villages of Stickeens, Sitkas, Chilkats, Kootznahoos, etc., in close juxtaposition. In the *Polaris*, of Portland, Oregon, under date of November 19, 1881, I find the following description of the old Stickeen village, just below Wrangell, from the pen of the Rev. Dr. Lindsley, a well-known divine and missionary of the Northwest:

"The next day we went to the site of the old Stickeen town. It was a beautiful situation, looking out upon the sea, sheltered and with sunny exposure. In the bay were several islands. One of them was kept sacred as a burial place. The tombs were visible at a distance. These were strong boxes raised above the ground for protection, built in the shape of houses, sometimes painted, and within which the remains are deposited. We could not but admire the rude taste, as well as the sentiments which were thus conveyed. The buildings were falling into decay; but enough remained to impress us with the fact that their mechanical skill was of no recent origin. The Stickeens have occupied the site for generations past; and here were immense

wooden houses that might have been standing a century ago, judging from the condition of the wooden buildings which I had examined on the Atlantic coast, and which are known to have been erected before the Revolutionary War. Those buildings were frail; these, built of massive timbers and posts of from two to three feet in diameter, some round, and others squared. The planks for the floors were several inches thick. The mortise and tenon work in the frames joined with accuracy, and other mechanical contrivances appeared in these structures. All were large, and some immense. I measured one house sixty by eighty feet.

"The domestic life is patriarchal, several families being gathered under one roof. Genealogies were kept for ages, and honors and distinctions made hereditary. To mark these, insignia, like a coat-of-arms, were adopted, and in rude carvings they strove to represent them. I could decipher, also, the paint-

T'LINKET BASKET WORK.
(Made by the Indians of the Inland Passage.)

ings that once figured these upon the posts and sides of houses. The eagle, the whale, the bear and the otter, and other animals of sea and land, were the favorites, ofttimes coupled with a warrior in the attitude of triumph. Gigantic representations of these family emblems were erected near the house, on posts, twenty to thirty feet high, covered with carvings of animals, and the devices stained with permanent pigments of black, red and blue. [See illustration on page 66, which is the front of a chief's house at Kaigan village.] Imaginary creatures resembling griffins or dragons, and reminding you of the mammoth animals that flourished in a distant geological period, were carved on the posts or pictured on the walls. Raised figures resembling hieroglyphics and Asiatic alphabets were carved on the inside wall. Some of the posts containing the family coat-of-arms, thus highly carved and decorated according to the native

taste, were used as receptacles for the remains of the dead, gathered up after cremation. Great sacredness was attached to them. To injure one was to insult the family to which it belonged ; to cut one down was an unpardonable offense.

"The description which I have now given will answer, with some unimportant differences, for the native houses as they are found elsewhere."

Of the readiness of these Indians to give exhibitions of their savage manners and customs for their visitors,—and which one will seldom see elsewhere, and never with so little trouble and effort on the spectator's part,—Dr. Lindsley says: "By previous invitation, the missionaries and their guests assembled at the house of Tow-ah-att, a *tyee*, or chief of the Stickeen tribe. An exhibition of manners and customs had been prepared for us, to show us what Indian life had been. * * * The insignia on Tow-ah-att's house were the eagle and wolf, marking the union of two families. A brief address of welcome introduced the entertainment. Among the customs shown to us by the dramatic representation, were a warrior with blackened face, with spear and helmet, and with belt containing a two-edged knife, or dagger ; a chief in full dress made of skins and a robe made of the wool of a mountain sheep. [For this robe see the illustration on page 81.] Each of these presented an imposing appearance. After these, masks and effigies appeared ; next, a *potlatch* dance, in which a large number of the natives of both sexes engaged. This was followed by dances which were used only upon notable occasions which might be called sacred or religious. These dances and the chants were regarded by the natives with a species of veneration. We were struck with the comparative excellence of the singing which accompanied these dances, displaying a considerable amount of culture. Evidently much practice had been bestowed upon the art, as the large number, young and old, who engaged in them, observed the musical rests and parts with great precision. A large number of whites and Indians were present at this entertainment, and the house was not crowded. Our entertainers observed some formalities which could do no discredit to the most enlightened assemblies. After an address of welcome, and short speeches from visitors, one of the chiefs, Tow-ah-att, delivered a formal discourse."

Mr. Ivan Petroff, a Russian, of Alaska, who was deputized by the Superintendent of the United States Census of 1880 to collect statistics for his report regarding Alaska Territory, finds the following interesting items regarding the Indian tribes which the tourist will encounter in his trip to Southeastern Alaska :

"The outward characteristics of the T'linkit tribe may be enumerated as follows : The coarse, stiff, coal-black hair, dark eyebrows, but faintly delineated over the large black eyes full of expression ; protruding cheek bones ; thick, full lips (the under lips of the women disfigured by the custom of inserting round or oval pieces of wood or bone), and the septum of the men pierced for the purpose of inserting ornaments ; beautiful white teeth ; ears pierced not

only in the lobes, but all around the rim. To these may be added the dark color of the skin, a medium stature, and a proud, erect bearing (this only applies to the men). The hands of the women are very small, and large feet are rarely met with.

"Before their acquaintance with the Russians, the only clothing of the T'linkits consisted of skins sewed together, which they threw around their naked bodies without regard to custom or fashion. In addition to this, they wore, on festive occasions, blankets woven out of the fleeces of mountain goats. From time immemorial they have possessed the art of dyeing this material black and yellow by means of charcoal and a kind of moss called *sekhone*. The patterns of these blankets, wrought in colors, exhibit an astonishing degree of skill and industry; the hat, plaited of roots, is also ornamented with figures and representations of animals.

"Both men and women paint their faces black and red with charcoal or soot, and vermilion (cinnabar), which are their favorite colors. They are mixed with seal oil, and rubbed well into the cuticle; subsequently, figures and patterns are scratched upon this surface with sticks of wood. The wealthy T'linkits paint their faces every day, while the plebeians indulge in this luxury only occasionally. As a rule, the T'linkits of both sexes go barefooted.

"The men pierce the partition of the nose, the operation being performed in early childhood, frequently within a few weeks after birth. In the aperture thus made a silver ring is sometimes inserted large enough to cover the mouth; but the poorer individuals insert other articles, such as feathers, etc. They also pierce the lobes of the ear for the purpose of inserting shark's teeth, shells, and other ornaments, while through the holes around the rim of the ear they draw bits of red worsted or small feathers. Veniaminoff states that each hole in the ear was pierced in memory of some event or deed.

"The ornamentation of the under lip of a female (now almost obsolete) marked an epoch in her life. As long as she remained single she wore this; but, as soon as she was married, a larger piece of wood or bone was pressed into the opening, and annually replaced by a still larger one, the inner side being hollowed out. It was, of course, impossible for these individuals to close their mouths, the under lip protruding, distended by the disk of wood or bone.

"Veniaminoff states that among the T'linkits the married women are permitted to have what are called 'assistant husbands,' who are maintained by the wives. Among the T'linkits the office of vice-husband can only be filled by a brother or near relative of the husband.

"The T'linkits burn their dead upon funeral pyres, with the exception of the bodies of shamans, or sorcerers, which are deposited in boxes elevated on posts. The dead slave is not considered worthy of any ceremony whatever; his corpse is thrown into the sea like the carcass of a dog. When a T'linkit dies his relatives prepare a great feast, inviting a multitude of guests, especially if the deceased has been a chief or a wealthy member of a clan. The guests are chosen only from a strange clan; for instance, if the deceased belonged to the Raven clan, the guests must be from the Wolf clan, and *vice versa*. No certain

time is set for the cremation or for the festivities; this depends altogether upon the magnitude of the preparations. Poor people who are unable to defray the cost of such ceremonies, take their dead to some distant cove or bay, and burn them without any display. When the guests have assembled and the pyre has been erected, the corpse is carried out of the village by invited guests, and placed upon the fagots. The pyre is then ignited in the presence of the relatives; but these latter take no active part, confining themselves to crying, weeping and howling. On such occasions many burn their hair, placing the head in the flames; others cut the hair short, and smear the face with the ashes of the deceased. When the cremation of the body has been accomplished, the guests return to the dwelling of the deceased, and seat themselves with the widow, who belongs to their clan, around the walls of the hut; the relatives of the deceased then appear with hair burned and cropped, faces blackened and disfigured, and place themselves within the circle of guests, sadly leaning upon sticks with bowed heads, and then begin their funeral dirges with weeping and howling. The guests take up the song when the relatives are exhausted, and thus the howling is kept up for four nights in succession, with only a brief interruption for refreshment. During this period of mourning, if the deceased had been a chief, or wealthy, the relatives formerly killed one or two slaves, according to the rank of the dead, in order to give him service in the other world. At the end of the period of mourning, or on the fourth day following the cremation, the relatives wash their blackened faces and paint them with gay colors, at the same time making presents to all the guests, chiefly to those who assisted in burning the corpse. Then the guests are feasted again, and the ceremony is at an end. The heir of the deceased is his sister's son, or, if he has no such relative, a younger brother. The heir was compelled to marry the widow."

While I was at Chilkat the chief of the Crow clan was cremated with most savage ceremonials, no doubt well worth seeing, to which I was invited; but my preparations for my expedition kept me from accepting the invitation.

Leaving Killisnoo, we cross Chatham Strait almost at right angles to its course (or due west), here about ten miles wide, and enter Peril Straits, about thirty-five miles long. They sweep boldly to the north in a great arc, and, like all winding and rapidly and alternately widening and narrowing of the inland channels, they are extremely picturesque, more from the contrast of different scenes so swiftly changed before one's eyes, than from anything radically new so presented. The old Russian name for them was Paboogni (meaning "pernicious") Strait, and they got this title rather from an incident of appetite than bad navigation. In the latter part of last century the Russians used to import the poor Aleuts of the Aleutian Islands, far to the westward, as mercenaries to fight their battles for them against the T'linkit Indians of this region; and, while encamped here, they partook of a large number of mussels, which proved poisonous, killing some, and putting many on the sick list for that particular campaign. In some of the very contracted places the tides run with great

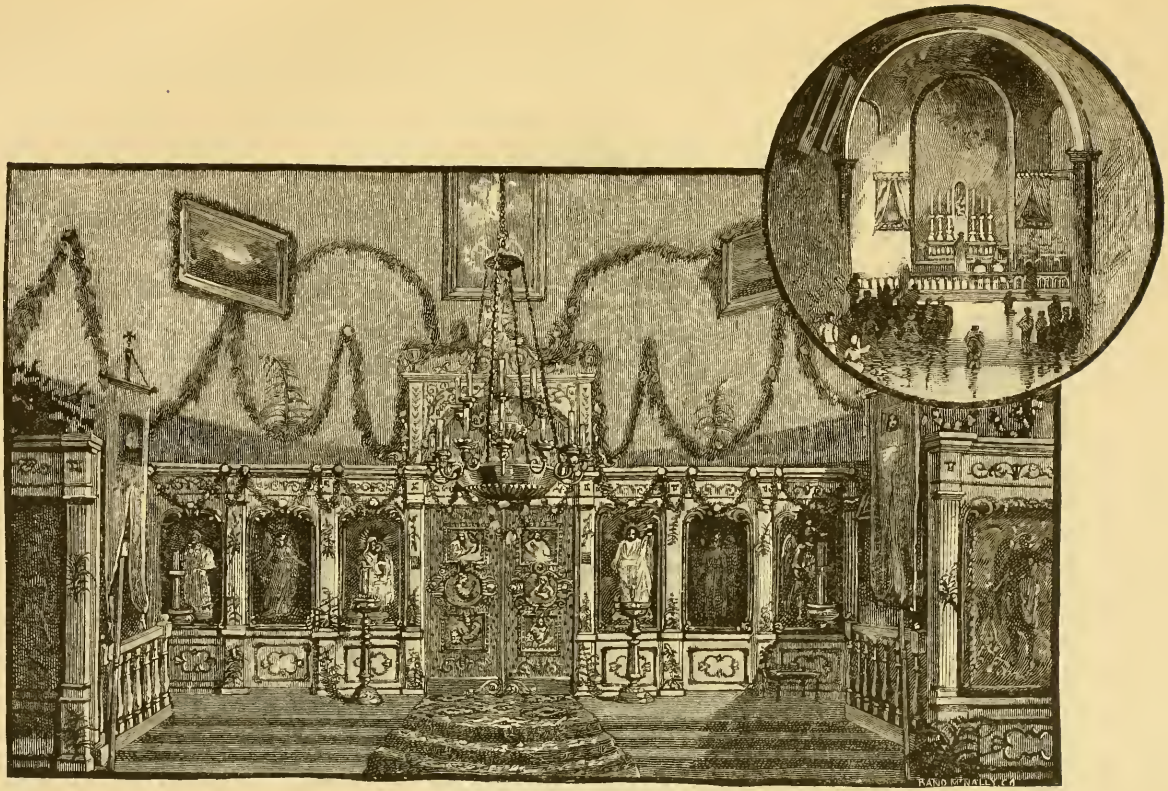
SITKA, ALASKA

velocity; but, by taking advantage of the proper times (which the nearness of Killisnoo on one side and Sitka on the other makes easy) and a more thorough knowledge of the few impediments, the dangers to navigation here are now about *nil*. Once through Peril Straits, we can look out on the Pacific Ocean through Salisbury Sound for a few minutes before turning southward through a series of short straits and channels "too numerous to mention;" and then, after twenty to twenty-five miles of sailing, we come to Sitka, the capital of the Territory. It is most picturesquely located at the head of Sitka Sound, through which, looking in a southwest direction, the Pacific Ocean is plainly visible. Looking in this way, its bay seems full of pretty little islets, sprinkled all over it, that are almost invisible as seen from the ocean when approaching, so densely are they covered with timber, and so exactly like the timbered hills of the mainland, against which they are thrown. The steamer, after winding its way through a tortuous channel, finally brings to at a commodious wharf, with the city before you, which is in strange contrast with the wild, rugged scenery through which the tourist has been sailing. To our left, as we pass on to the wharf, is the Indian village of the Sitkas, one of the largest among the islands of the inland passage. To our front and right stretch the white settlements of the town. At the large Indian village, which is near—or, really, part of—Sitka, there are estimated to gather fully a thousand Indians in the winter time, the summer finding them partially dispersed over a greater area to gain their sustenance. These houses are like those described as being near Wrangell. In one way they have somewhat patterned after white men, in partitioning off the ends and sides of these large rooms into sleeping apartments by canvas and cloth drapery. It is said that the most fiendish ceremonies and diabolical cruelties were practiced at their "house-warmings," so to speak. Before the white men put a stop to these ceremonies, a slave was killed, with the greatest cruelties, under each of the corner uprights; and, as a house could not have less than four of these, and sometimes had more, by its irregularities, one may contemplate the suffering with which a large village like that at Sitka has been baptized.

In the town proper the Greek Church is the most conspicuous and interesting object to the tourist, and especially those who have never seen one of this religion. It is built in the form of a Greek cross, in plan, and is surmounted by an Oriental dome over the centre, which has been painted an emerald green color. One wing is used as a chapel, and contains, besides a curious font, an exquisite painting of the Virgin and Child, copied from the celebrated picture at Moscow. All the drapery is of silver, and the halo of gold; so, of the painting itself, nothing is seen but the faces and background. The chancel, which is raised above the body of the church, is approached by three broad steps leading to four doors, two of which are handsomely carved and richly gilded, and contain four oval and two square *bas reliefs*. Above is a large picture of the Last Supper, covered, like that of the Madonna, with silver, as are two others, one on each side of the altar. Across the threshold of these doors

no woman may set her foot, and across the inner ones to the innermost sanctuary none but the priest himself, or his superiors in the general Greek Church, or the white Czar, can enter. The doors, however, usually stand open ; and the priest in residence, Father Metropaulski, is exceedingly courteous to visitors, showing them the costly and magnificent vestments and the bishop's crown, almost covered with pearls and amethysts. The ornaments and the candelabra are all of silver, the walls are hung with portraits of princes and prelates, and the general effect is rich in the extreme.

Next to the church in interest—with some visitors, probably, ranking before it—is the old Muscovite castle on the hill. Here, in days gone by, the stern Romanoff ruled this land, and Baron Wrangell, one of Russia's many celebrated Polar explorers, held sway. It is said that it has been twice destroyed, once by fire and then by an earthquake, but was again erected with such staunch belongings that it will probably stand for ages much as it is to-day. It is now used as an office for United States Government officials, and it has a ball-room and theatre, with the same old brass chandeliers and huge bronze hinges that adorned it in its glory. The whole building has a semi-deserted and melancholy appearance ; but it is of exceeding interest, speaking to us as it does of a grander history, when Sitka was the metropolis of the Pacific coast of North America, and it was the centre from which such power emanated. To sentimental tourists I will relate a tradition that has been published concerning the stern old castle ; and, whether it fits the truth or not, it fits the sombre surroundings of the ancient pile. It runs, that, when Baron Romanoff was governor, he had living with him an orphan niece and ward, who, like all orphan nieces in feudal castles, especially those who figure in tradition, was very beautiful. But, when the baron commanded her to marry a beautiful prince, who was a guest at the castle, she refused, having given her heart to a handsome young lieutenant of the household. The old baron, who, like the rest of his race in traditional accounts, was an accomplished diplomate, feigning an interest in the young lieutenant which he did not feel, sent him away on a short expedition, and in the mean time hurried on the preparations for the marriage of the unhappy girl to the prince. Deprived of the support of her lover's counsels and presence, she yielded to the threats of her uncle, and the ceremony was solemnized. Half an hour after the marriage, while the rejoicing and the gayety were at their height, the young lieutenant strode into the ball-room, his travel-stained dress and haggard appearance contrasting strangely with the glittering costumes and gay faces of the revelers ; and, during the silence which followed his ominous appearance, he stepped up to the hapless girl, and took her hand. After gazing for a few moments on the ring the prince had placed there, he, without a word, and before any one could interfere, drew a dagger from his belt, and stabbed her to the heart. In the wild confusion that followed, he escaped from the castle ; and, overcome with grief, unable to live without the one he so fondly loved, yet ruthlessly murdered, he threw himself into the sea. And now her spirit is seen on the anniversary of her wedding night, her slender form



CHANCEL OF THE GREEK CHURCH, SITKA.

robed in heavy silk brocade, pressing her hands on the wound in her heart, the tears streaming from her eyes. Sometimes, before a severe storm, she makes her appearance in the little tower at the top of the building once used as a light-house. There she burns a light until dawn for the spirit of her lover at sea.

Almost directly west from Sitka, about fifteen miles distant, is Mount Edgecumbe, so named by Cook, it having previously been called Mount San Jacinto by Bodega in 1775, and Mount St. Hyacinth again by La Perouse. Tchirikov, before all others, I believe, got it chronicled as Mount St. Lazarus; and it looked as if it would go through the whole calendar of the saints, and their different national changes, if it had not gotten pretty firmly rooted as Mount Edgecumbe. It is nearly 3,000 feet above the level of the sea, and looks like a peak of 5,000 feet cut off by a huge shaving plane at its present height. This truncated apex is a crater, said to be, by those who have visited it, some 2,000 feet in diameter by one-tenth as deep. In the early and middle summer time, the snow from its table-like crown has partially disappeared, and the bright red volcanic rock projects in radiating ridges from the white covering that is disappearing, making a most beautiful crest to a mountain already picturesque by its singular isolation. When in this condition, with the western setting sun directly over it, and its golden beams radiating upward, and the royal red ridges radiating downward, both thrown against their background of blue sky and water and white snow, it makes a superb picture that the brush of a Turner could hardly copy, let alone a feeble pen describe.

Lieutenant C. E. S. Wood, who visited this portion of Alaska in 1877, and gave a graphic description of his travels in the *Century Magazine* of July, 1882, gives therein the following interesting Indian legend concerning Mount Edgecumbe:

"One drowsy eve we saw the peak of Edgecumbe for the last time. The great truncated cone caught the hues of the sunset, and we could note the gloom gathering deeper and deeper in the hollow of the crater. Our Indians were stolidly smoking the tobacco we had given them, and were resting after the labors of the day with bovine contentment. Tah-ah-nah-kléck related to us the T'linkit legend of Edgecumbe.

"A long time ago the earth sank beneath the water, and the water rose and covered the highest places, so that no man could live. It rained so hard that it was as if the sea fell from the sky. All was black, and it became so dark, that no man knew another. Then a few people ran here and there and made a raft of cedar logs; but nothing could stand against the white waves, and the raft was broken in two.

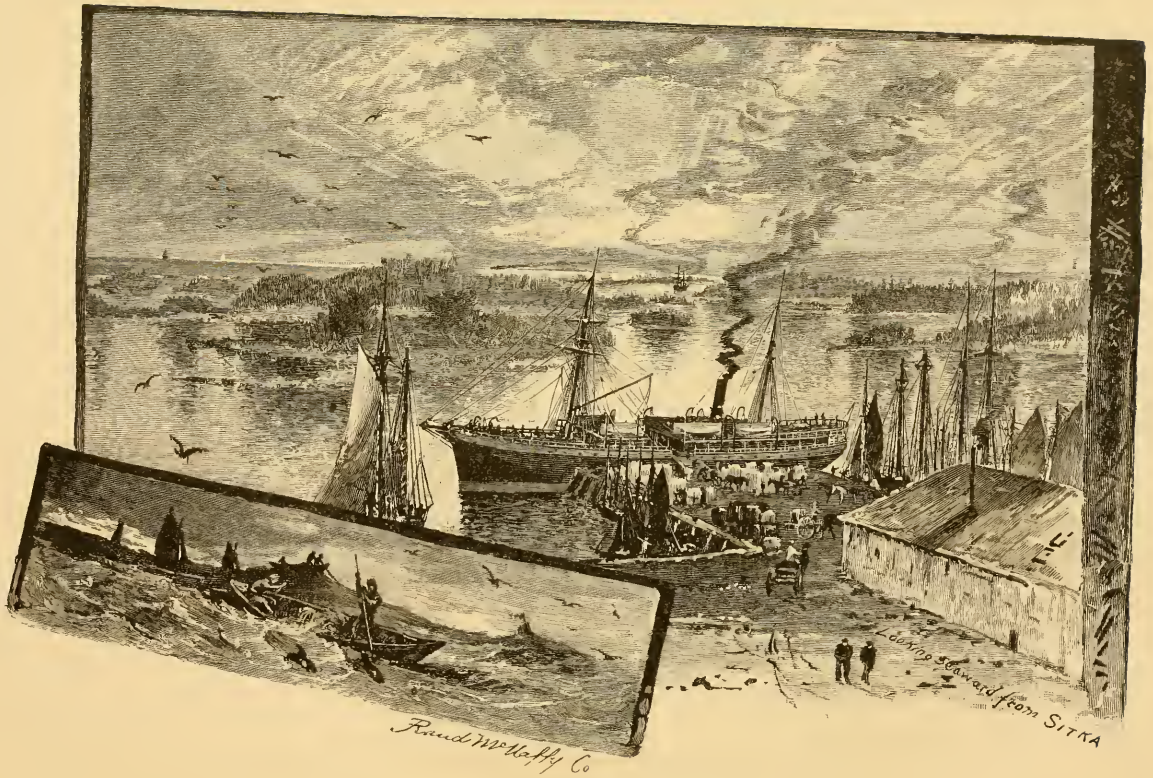
"On one part floated the ancestors of the T'linkits; on the other, the parents of all other nations. The waters tore them apart, and they never saw each other again. Now their children are all different, and do not understand each other. In the black tempest, Chethl was torn from his sister Ah-gish-áhn-ahkon [The-woman-who-supports-the-earth]. Chethl [symbolized in the osprey] called aloud to her, 'You will never see me again; but you will hear my voice forever!' Then he became an enormous bird, and flew to southwest, till no eye could follow him. Ah-gish-áhn-ahkon climbed above the waters, and reached the

summit of Edgecumbe. The mountain opened, and received her into the bosom of the earth. That hole [the crater] is where she went down. Ever since that time she has held the earth above the water. The earth is shaped like the back of a turtle, and rests on a pillar; Ah-gish-áhn-ahkon holds the pillar. Evil spirits that wish to destroy mankind seek to overthrow her and drive her away. The terrible battles are long and fierce in the lower darkness. Often the pillar rocks and sways in the struggle, and the earth trembles and seems like to fall; but Ah-gish-áhn-ahkon is good and strong, so the earth is safe. Chethl lives in the bird Kunna-Káht-eth; his nest is in the top of the mountain, in the hole through which his sister disappeared.

"He carries whales in his claws to this eyrie, and there devours them. He swoops from his hiding-place, and rides on the edge of the coming storm. The roaring of the tempest is his voice calling to his sister. He claps his wings in the peals of thunder, and its rumbling is the rustling of his pinions. The lightning is the flashing of his eyes."

Looking inland are the glacier-clad summits of the interior mountains, Vostovia predominating, where few people, even among the Indians of the country, have ever been. Taking all its surroundings, it may be well said, as has been written, that Sitka Bay rivals in scenic beauty its nearest counterpart, the far-famed Bay of Naples. Near Sitka comes in a beautiful mountain stream called the Indian river. A most picturesque road leads out to this rambling brook, and a less frequented trail winds up its valley; but, if the steamer stops long enough to warrant the tramp, no one should fail to stroll along its two or three miles of winding way, embowered in absolutely tropical foliage, so dense and deep is it. It is the only road worthy of the name in Alaska; and, if one wends his way through it, and then combines his information acquired thereby with a view of the Alpine country of this part of the Territory, he will plainly comprehend why there are no more roads than this particular one, and feel willing to give full credit to its makers. It is near the half-way point of the journey, also; and this warrants a little inshore exercise that can be had at no other stopping place so well.

About ten or eleven miles south of Sitka, on the mainland, but protected seaward by a breakwater of (Necker) islands, is Hot Springs Bay, on whose shores are springs which give it its name. About six or seven years before we obtained the Territory, the Russian American Fur Company, whose headquarters were at Sitka (since Baron Wrangell established them there in 1832), built a hospital at Hot Springs, which was said to have had wonderful remedial powers in skin and rheumatic diseases; but, for some reasons, the place has been abandoned (probably the lack of government by the United States), and the buildings are reported to be in a state of decay. The Indians used the waters for illness, and thus called the attention of the Russians thereto. The temperature of the water is from 120 to 125 degrees, and it contains a number of elements held in solution, as sulphur, chlorine, manganese, sodium and iron, besides combinations of these, and with other elements. It is worth a visit to see these hot



ALASKA'S THOUSAND ISLANDS, AS SEEN FROM SITKA

springs, with the thermometer soaring up above the hundreds ; for, in a day or two, by way of strange contrast, you will be among glaciers and icebergs towering as far in feet above your head.

The only way out of Sitka harbor, without putting to sea, is back through Peril Straits again ; and, passing back, one can hardly realize that it is the same waterway, so radically different are the views presented. In the harbor of Sitka is Japonskoi (Japanese) Island, which may be identified by the captain's chart of the harbor, and which has a curious history. Here, about eighty years ago, an old Japanese junk, that had drifted across the sea on the Kuro-Siwo, or Japanese current, was stranded, and the Russians kindly cared for the castaway sailors who had survived the dreadful drift, and returned them to their country, after an experience that is seldom equaled, even in the romantic accounts of maritime misfortunes. The drifting of Japanese junks, and those of adjacent countries, is not so infrequent as one would suppose, and this fact might set the reflective man to thinking as to the ethnical possibilities accruing therefrom, the settlement of North America, etc.

This Kuro-Siwo, or Japanese current,—sometimes called black current, or Japanese black current, from its hue,—corresponds in many ways to the Gulf Stream of the Atlantic : like it, its waters are warmed in the equatorial regions under a vertical sun ; and, like it, a great portion of these waters are carried northward in its flow, and their heat poured upon the eastern shores of its ocean, till their climate is phenomenally temperate compared with the western shores in the same parallels. Sitka is said to have, as a result of facing this current, a mean winter temperature of a point half way between Baltimore and Washington, or slightly milder than the winter temperature of Baltimore. It is said to be no unusual thing to suffer from an ice famine in Sitka. A short way inland the winters are not so temperate, more snow falling at that season, while rain characterizes the coast face ; but during the summer, or excursion season, these rains are not unpleasantly frequent. I take the following from a letter from Sitka, and published in the San Francisco *Bulletin* of January 9, 1882, before this country was really opened to excursionists, although the subject was being discussed, so much had been heard of this wonderland :

" The climate, as shown by the meteorological data collected by the signal service observers, is not of such a disagreeable character as some would have us believe. The scientific data collected and tabulated for the year 1881, as shown by the records at Sitka, Chilkoot, Juneau and Killisnoo, disprove most emphatically the seemingly malicious assertions in reference to its climate.

	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Mean Temperature .	42.5	45.4	51.2	54.2	56.7	54.	46.3	41.8	34.8
Max. Temperature .	56.5	61.	65.	67.	79.	63.8	57.8	52.8	44.9
Min. Temperature ..	31.	31.	41.	43.	43.9	40.5	32.	22.5	14.
Total rainfall, inches	4.21	3.1	1.54	4.4	1.98	12.11	5.04	13.5	10.52

"A study of the above data, combined with an actual experience, compels the writer to admit that the summer weather of Southeastern Alaska is the most delightful that can be enjoyed throughout the length and breadth of this vast territory, and throws in the shade all the boasted claims of many, if not most, of the famous summer resorts in the 'States.' There were only two days during the long, pleasant summer, that were rendered disagreeable by that feeling of oppressiveness caused by heat. The nights were cool and pleasant; the days always warm enough for open windows, through which the invigorating breezes from the snow-capped mountains or the broad Pacific, would blow at will; the long, bright days, when the sun disappeared only for a few hours, when twilight, after sunset, seemed to mingle with the rays of early dawn; the nights beautified by the dancing beams of the *aurora borealis*, and the myriad stars that seemed as if hung on invisible threads in the deep blue firmament. * * In regard to the summer weather, I reiterate that no one could possibly choose a more delightful place in which to spend a portion of the heated term than in making a trip through this portion of the Territory."

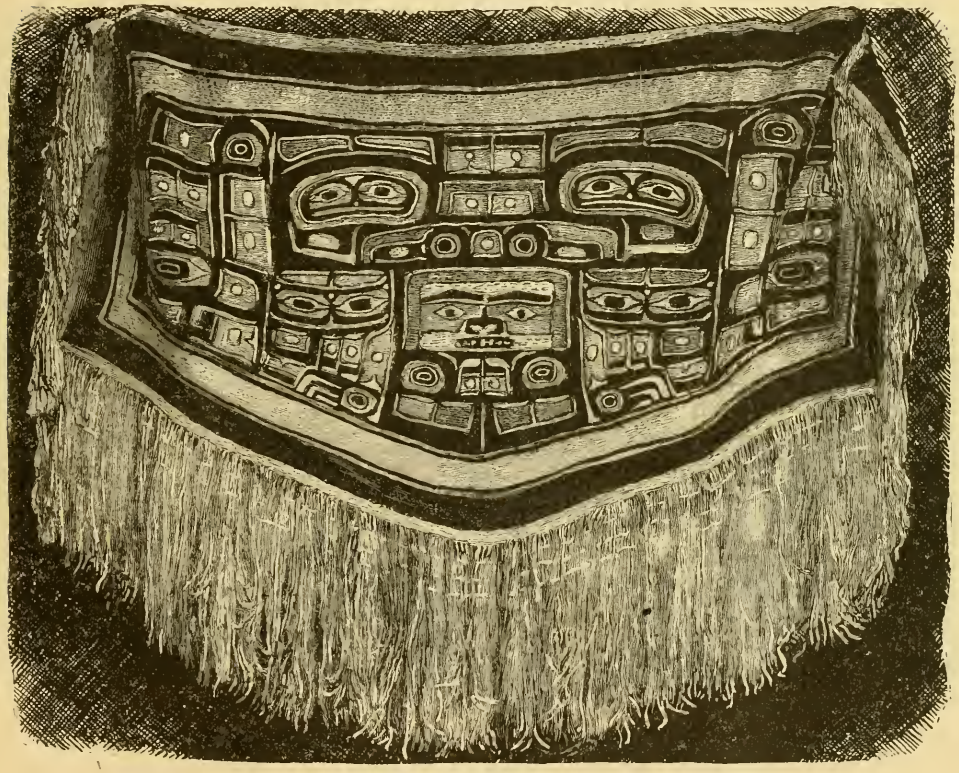
"In Alaska, in midsummer," according to a late letter, "the almost continuous light of day shines upon bright green slopes, shaded here and there with dark timber belts, rising up from the deep blue waters. An endless variety of bright-hued flowers, the hum of insects, and melodious song of birds, * * * would cause a stranger, suddenly translated there, to think himself in any country but Alaska."—*Chicago Herald*, 1885.

When we are some five or six miles back on our northward way to Peril Straits, a pretty little bay, on Baronoff Island, is pointed out to us, on our starboard (by this time all the passengers are able seamen) side, called Old Harbor, or Starri-Gaven, in Russian. It was there that Baronoff built his first fort, called the Archangel Gabriel, in 1799, which, after a number of rapidly recurring vicissitudes, was annihilated, and its garrison massacred, by the Sitka Indians, three years later. Baronoff re-established his power at the present site of Sitka, calling the new place Archangel Michael,—Archangel Gabriel having failed in his duty as a protector; and from this name it was called New Archangel, which changed to Sitka with the change of flags in 1867, although American maps had dubbed it Sitka before this.

Once more in Chatham Strait, with the ship's head pointed northward, we are on our way to the northernmost recesses of the inland passage, and with the greatest wonders of our wonderland ahead of us. At its northern end, Chatham Strait divides into two narrow waterways, Icy Strait leading off to the west, to the land and waters of glaciers and icebergs, while Lynn Canal continues broad Chatham to the north. Lynn Canal is a double-headed inlet, the western arm at its head being called the Chilkat Inlet, and the eastern arm the Chilkoot Inlet, after two tribes of T'linkit Indians living on these respective channels. It is a beautiful sheet of water, more Alpine in character than any yet entered. Glaciers of blue and emerald ice can be seen almost everywhere, peeping from underneath the snow-capped mountains and

ranges that closely enclose this well-protected canal, and render it picturesque in the extreme. Here is the Eagle Glacier on the right, and dozens that have never been named, and a most massive one (Davison's) on our left, just as we enter Chilkat Inlet. At the head of Chilkat Inlet is Pyramid Harbor, so named after an island of pyramidal profile in its waters. It marks the highest point you will probably reach in the inland passage, unless Chilkoot Inlet is entered, which is occasionally done.

We are now in the land of the Chilkats, one of the most aggressive and arrogant, yet withal industrious and wealthy, Indian tribes of the T'linkits. It



CHILKAT BLANKET.

should be remembered that all the Alaskan Indians of the inland passage (except the Hy-dahs of Dixon Entrance) are bound together by a common language, called the T'linkit ; but having so little else in sympathy that the sub-tribes often war against each other, these sub-tribes having separate chiefs, medicine men and countries, in fact, and being known by different names. We have already spoken of the Stickeens, Kootznahoos, Sitkas, etc.; and by these names they are known among the whites of this portion of the Territory, the title T'linkit being seldom heard. At the salmon cannery, on the west shore, a small

but recently built village of Chilkats is clustered ; but, to see them in "all their glory," the Chilkat river should be ascended to their principal village of Klukwan.

Of this country,—the Chilkat and Chilkoot,—Mrs. Eugene S. Willard, the wife of the missionary presiding at Haines Mission, in Chilkoot Inlet, and who has resided here a number of years, writes in the *Century Magazine,* of October, 1885:

"From Portage Bay(of Chilkoot Inlet) west to the Chilkat river and southward to the point, lies the largest tract of arable land, so far as my knowledge goes, in Southeastern Alaska, while the climate does not differ greatly from that of Pennsylvania * * * Here summer reaches perfection, never sultry, rarely chilling. * * * In May the world and the sun wake up together. In his new zeal, we find old Sol up before us at 2:15 A. M., and he urges us on until 9:45 at night. Even then the light is only turned down ; for the darkest hour is like early summer twilight, not too dark for reading.

"From our front door to the pebbly beach below, the wild sweet pea runs rampant ; while under and in and through it spring the luxuriant phlox, Indian rice, the white-blossomed 'yun-ate,' and wild roses which make redolent every breath from the bay. Passing out the back door, a few steps lead us into the dense pine woods, whose solitudes are peopled with great bears, and owls, and—T'linkit ghosts ! while eagles and ravens soar without number. On one tree alone we counted thirty bald eagles. These trees are heavily draped with moss, hanging in rich festoons from every limb ; and into the rich carpeting underneath, one's foot may sink for inches. Here the ferns reach mammoth size, though many of fairy daintiness are found among the moss ; and the devil's walking stick stands in royal beauty at every turn, with its broad, graceful leaves, and waxen, red berries.

"Out again into the sunshine, and we discover meadows of grass and clover, through which run bright little streams, grown over with willows, just as at home. And here and there are clumps of trees, so like the peach and apple, that a lump comes into your throat. But you lift your eyes, and there beyond is the broad shining of the river, and above it the ever-present, dream-dispelling peaks of snow, with their blue ice sliding down and down. * *

"The Chilkat people long ago gained for themselves the reputation of being the most fierce and warlike tribe in the Archipelago. Certain it is, that, between themselves and southern Hy-dah, there is not another which can compare with them in strength, either as to numbers, intelligence, physical perfection, or wealth. * * * The children always belong to their mother, and are of her to-tem. This to-temic relation is considered closer than that of blood. If the father's and mother's tribes be at war, the children must take the maternal side, even if against their father. * * * In very rare cases a woman has two husbands ; oftener we find a man with two wives, even three ; but more frequently met than either is the consecutive wife.

"The Chilkats are comparatively an industrious people. On the mainland we have none of the deer which so densely populate the islands, owing, it is said, to the presence of bears and wolves; but we have the white mountain goat, which, while it is lamb, is delicious meat. From its black horns the finest carved spoons are made, and its pelt, when washed and combed, forms a necessary part of the Indian's bedding and household furniture. The combings are made by the women into rolls similar to those made by machinery at home. Then, with a great basket of these white rolls on one side, and a basket on the other to receive the yarn, a woman sits on the floor, and, on her bared

T'LINKET WAR CANOE.

knee, with her palm, rolls it into cord. This they dye in most brilliant colors made of roots, grasses and moss, and of different kinds of bark.

"It is of this yarn that the famous Chilkat dancing-blanket is made. This is done by the women with great nicety and care. The warp, all white, is hung from a handsomely carved upright frame. Into it the bright colors are wrought by means of ivory shuttles. The work is protected during the tedious course of its manufacture by a covering resembling oiled silk, made from the dressed intestines of the bear. Bright striped stockings of this yarn are also knitted on little needles whittled from wood."

An illustration of a dancing-blanket is given on page 81. These are made by several of the T'linkit tribes; but the Chilkats so predominate in the manufact-

ure, both in numbers and excellence, that you seldom hear them mentioned in Alaska, except as Chilkat blankets. Nearly all of the T'linkit tribes, as the tourist will have seen by this time, spend most of their out-of-door time in the water, in their canoes; and this constant semi-aquatic life has told on their physical development to the extent of giving them very dwarfed and illy developed lower limbs, although the trunk and arms are well developed. When walking, they seem to shamble along more like an aquatic fowl on land than a human being. The Chilkats are noticeable exceptions. Although their country is much more mountainous in appearance than others lower down, yet here are some of the most accessible of the few mountain passes by which the interior, a rich fur-bearing district, can be gained. The Chilkats have yearly taken trading goods from the white men, lashed them into packs of about a hundred pounds, and carried them on their backs through these glacier-clad passes, and traded them for furs, bringing them out in the same way. They monopolized the trade by the simple process of prohibiting the interior Indians from coming to the sea-coast to trade. The Chilkats therefore are probably the richest tribe of Indians in the Northwest, the chief having two houses full of blankets, their standard of valne, at the village of Kluk-wan.

To those who find their greatest pleasure in a rough, out-of-door life, let them leave the steamer at this point, hire three or four Indians to carry their company effects on their backs, and make an Alpine journey to the head of the Yukon river, where lakes aggregating 150 miles in length can be passed over in a canoe. The route leads up the Dayay river, over the Perrier Pass in the Kotusk Mountains. The trip could be made between visiting steamers, and I will guarantee the persons will come back with more muscle than they took in.

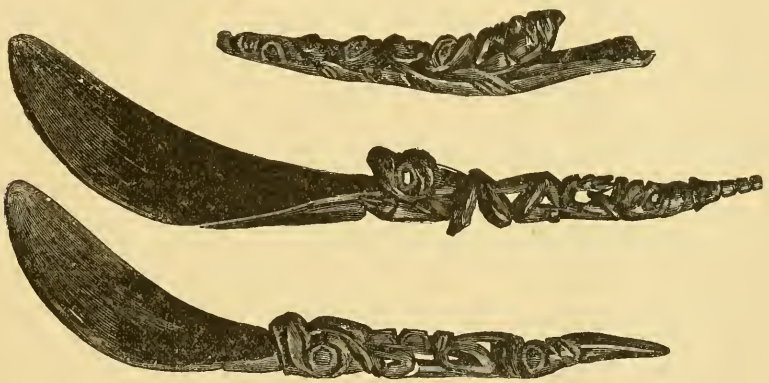
Bidding good-bye to the picturesque country of the Chilkats, the steamer's head is turned south again; and, when just about ready to leave Lynn Canal, we entered an intricate series of channels bearing eastward, and which bring us to the great mining town of Juneau, where many Alaskan hopes are centred. This is what a correspondent of the Chicago *Times*, under date of February 23, 1885, says of this Alaskan town and its curious history:

"The centre from which radiates whatever of excitement and interest there is in Alaskan mines is Douglas Island. The history of the discovery of ore near this island, which eventually led to the location of the present much-talked-of property, is similar to that attending the finding of most of the large mines in the West. It seems that some half-dozen years ago two needy and seedy prospectors named Juneau and Harris arrived at an Indian village that still remains visible on the shore across the bay from Douglas Island, in search of ore. They prospected the country as thoroughly as they could, with but little success, and were about to return home when an Indian said that he knew where gold existed, and that he would reveal the place for a certain sum of money. Hardly believing, but yet curious, Harris and Juneau accepted the offer, and, with their guide, set out on a pilgrimage into the interior to a spot now known as 'The Basin.' After a long tramp through the forests, and up a deep valley, the

Indian showed them a place where there were nuggets of free gold and dirt, which, when panned, yielded a handsome return. Claims were immediately staked out, and the adventurers began their work in earnest. Later, the fact of the discovery became known, and other miners entered the valley, and the region gained no little celebrity, and became the scene of much animation. Four years the work progressed, and a town, which to-day is of respectable size and great expectations, was founded, and christened Juneau.

"The Douglas Island mine is located within fifty yards of the waters of Juneau Bay, and was discovered by a man named Treadwell, who sold his claim a year or two ago to a San Francisco company. The new owners set up a fine stamp-mill to begin with, and made thorough tests of the ore. It is a 120-stamp mill, the largest in the world, and the company has refused, it is said, $16,000,000 for the mine."

Since the above was written, and as late as last August, reports from there gave the astonishing showing of enough ore in sight to keep the 120-



T'LINKET CARVED SPOONS.
(Made from the Horns of Mountain Goats.)

stamp mill "running for a life-time." The uninitiated in mining mills, ledges and lodes, may grasp the value of the mine by saying its output for a twenty-days run of the stamp-mill was $100,000 in gold, or at the rate of $1,800,000 per year; which, estimating its value on an income of five per cent. annually, would make the mine worth $36,000,000, or just five times the amount we paid for the whole Territory. There is no doubt whatever in the minds of many experts, that there are a number of such places as the Treadwell mine yet to be found, the great difficulty of prospecting in the dense, deep mass of fallen timber covered with wet moss and thick underbrush on the steepest mountain sides, coupled with the little probability of the Treadwell being an isolated case in such a uniformly Alpine country, amply justifying them in coming to such conclusions. A visit to the mines is one the tourists can readily make. At Juneau we find the Takoo band of T'linkits in a village near by, where nearly all that has been said regarding Alaskan Indians may be here repeated. The

very curious spoons they carve from the horns of the mountain goat, which are figured on page 85, and beautifully woven mats, and the baskets shown on page 68, may be purchased; and, in leaving a few pieces of silver among them for their own handiwork, little as it is that we have thus done for them, it is far more than the extremists of either side in the Indian question have done, those who would exterminate, or those who would sentimentalize in print over their wrongs.

Bidding the mining metropolis of Alaska farewell, our bowsprit is once more pointed for the Pacific Sea; but, before we reach it, or get quite to it, we turn northward and enter Glacier Bay, its name signifying its main attractions. Glaciers, which are great rivers or sheets of ice made from compacted snows, are functions as much of altitude as of high latitude; and both unite here, with an air charged with moisture from the warm Pacific waters, to make the grand glaciers which are to be seen in this bay. In the immediate vicinity are the Mount St. Elias Alps, a snowy range which culminates in the well-known peak from which it derives its name; and, radiating from their flanks, come down these rivers of ice, reaching the sea-level in the greatest perfection in Glacier Bay, the largest one of the grand group being the Muir Glacier, after Professor John Muir, the scientist, of California, who is said to be the first to discover it. I will give the language of the man who claims to be the second to arrive upon the scene, and who gives his account in the St. Louis *Globe-Democrat*, writing from Glacier Bay, July 14, 1883:

"When Dick Willoughby told of the great glacier, thirty miles up the bay, the thud of whose falling ice could be heard and felt at his house, the captain of the 'Idaho' said he would go there, and took this Dick Willoughby along to find the place and prove the tale. Away we went coursing up Glacier Bay, a fleet of 112 little icebergs gayly sailing out to meet us as we left our anchorage the next morning. Entering into these unknown and unsurveyed waters, the lead was cast through miles of bottomless channels; and, when the pilot neared a green and mountainous little island, he made me an unconditional present of the domain, and duly entered its bearings on the ship's log. For a summer resort my island possesses unusual advantages, and I hereby invite all suffering and perspiring St. Louis to come to that emerald spot in latitude 58 degrees 29 minutes north, and longitude 135 degrees 52 minutes west from Greenwich, and enjoy the July temperature of 42 degrees, the whale fishing, the duck hunting, and a sight of the grandest glacier in the world.

"But one white man had ever visited the glacier before us, and he was the irrepressible geologist and scientist, John Muir, who started out in an Indian canoe, with a few blankets and some hard-tack, and spent days scrambling over the icy wastes. Feeling our way along carefully, we cast anchor beside a grounded iceberg, and the photographers were rowed off to a small island to take the view of the ship in the midst of that arctic scenery. Mount Crillon showed his hoary head to us in glimpses between the clouds; and then, rounding Willoughby Island, which the owner declares is solid marble of a quality to rival

that of Pentelicus and Carrara, we saw the full front of the great Muir Glacier, where it dips down and breaks into the sea. At the first breathless glance at that glorious ice-world, all fancies and dreams were surpassed: the marvelous beauty of those shining, silvery pinnacles and spires, the deep blue buttresses, the arches and aisles of that fretted front, struck one with awe. In all Switzerland there is nothing comparable to these Alaskan glaciers, where the frozen wastes rise straight from the sea, and a steamer can go up within an eighth of a mile, and cruise beside them. Add to the picture of high mountains and snowy glaciers a sapphire bay scattered over with glittering little icebergs, and nature can supply nothing more to stir one's soul, to rouse the fancy and imagination, and enchant the senses. The vastness of this Muir Glacier is enough alone to overpower one with a sense of the might and strength of these forces of nature. Dry figures can give one little idea of the great, desolate stretches of gray ice and snow that slope out of sight behind the jutting mountains, and the tumbled and broken front forced down to and into the sea. Although not half of the glacier has been explored, it is said to extend back 40 miles.

"What we could know accurately was, that the front of the glacier was two miles across, and that the ice-wall rose 500 and 1,000 feet from the water. The lead cast at the point nearest to the icy front gave eighty fathoms, or 240 feet, of water; and, in the midst of those deep soundings, icebergs filled with boulders lay grounded with forty feet of their summits visible above water. At very low tide, there is a continual crash of falling ice; and, for the half-day we spent beside this glacier, there was a roar as of artillery every few minutes, when tons of ice would go thundering down into the water. After the prosaic matter of lunch had been settled, and we had watched the practical-minded steward order his men down on the iceberg to cut off a week's supply with their axes, we embarked in the life-boats, and landed in a ravine beside the glacier. * * * We wandered at will over the seamed and ragged surface, the ice cracked under our feet with a pleasant mid-winter sound, and the wind blew keenly from over those hundreds of miles of glacier fields; but there were the gurgle and hollow roar of the water heard in every deep crevasse, and trickling streams spread a silver network in the sunshine. Reluctantly we obeyed the steamer's whistle, and started back to the boats.

"A magnificent sunset flooded the sky that night, and filled every icy ravine with rose and orange lights. At the last view of the glacier, as we steamed away from it, the whole brow was glorified and transfigured with the fires of sunset; the blue and silvery pinnacles, the white and shining front floating dreamlike on a roseate and amber sea, and the range and circle of dull violet mountains lighting their glowing summits into a sky flecked with crimson and gold."

Since the above was written, in July, 1883, Glacier Bay has been one of the constant visiting points of the excursion steamer, and the experience of two or three years has shown the company how to exhibit this great panorama of nature to its patrons to the best advantage, and one will now be astonished at

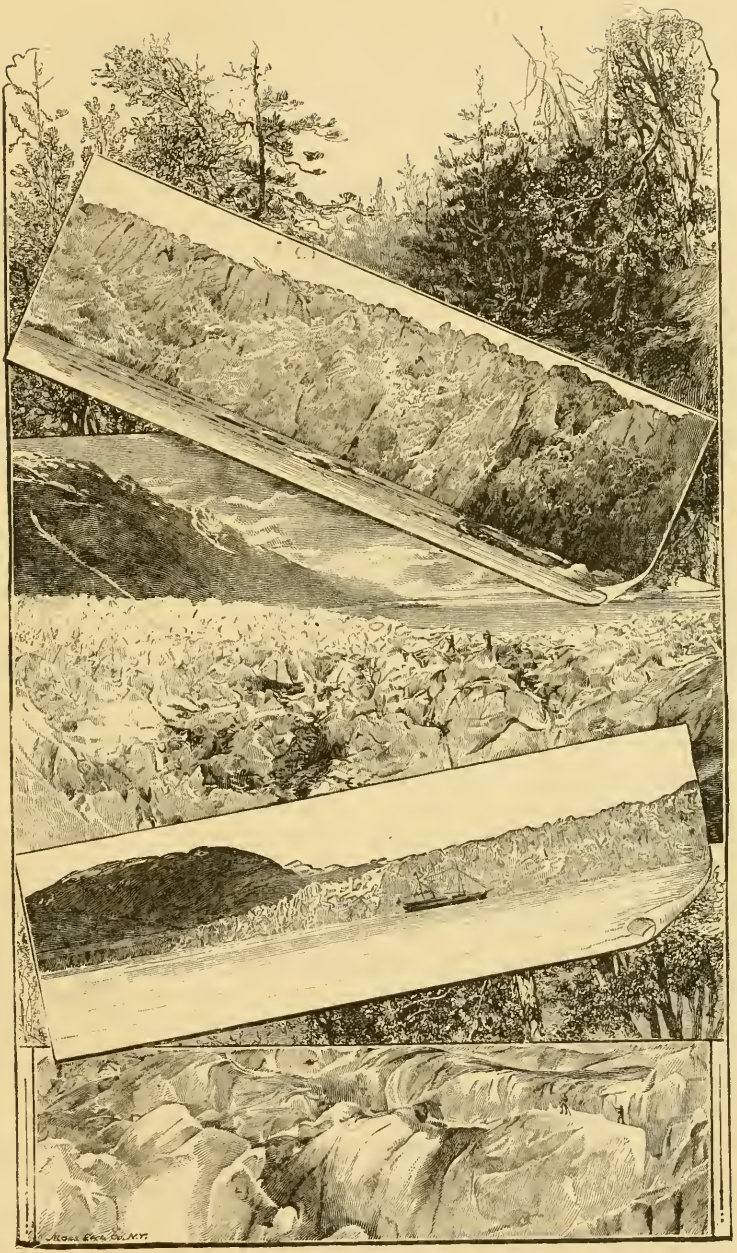
the ease with which the whole field may be surveyed in this the most wonderful bay on a line of steamboat travel.

Our same correspondent speaks of an unknown passage down which they traveled in a way that will delight the heart of a Nimrod ; but he should have added that almost half the inland passage is of that character so far as the general world is wiser concerning it, and half of this, again, may be wholly unknown, offering one of the finest fields for short explorations without any of the dangers and difficulties which so often beset greater undertakings, and rob them of all pleasure while they are being prosecuted, and only compensating the explorer in the results attained. Here is what he has to say :

" For the twenty miles that we had come down the beautiful inlet, the coast survey charts showed an unbroken stretch of dry land. To the sportsman that unknown inlet is the dreamed-of paradise. When we went out in the small boats, salmon and flounders could be seen darting in schools through the water ; and, as we approached the mouth of a creek, the freshening current was alive with the fish. The stewards who went to the shore with the tank-boats for fresh water, startled seven deer as they pushed their way to the foot of a cascade, and the young men caught thirteen great salmon with their own inexperienced spearing. The captain of the ship took his rifle, and was rowed away to shallow waters, where he shot a salmon, waded in, and threw it ashore. While wandering along after some huge bear tracks, he saw an eagle at work on his salmon, and another fine shot laid the bird of freedom low. When the captain returned to the ship he threw the eagle and salmon on deck, and, at the size of the former, every one marveled. The outspread wings measured the traditional six feet from tip to tip, and the beak, the claws, and the huge, stiff feathers were rapidly seized upon as trophies and souvenirs of the day. A broad double rainbow arched over us as we left the lovely niche between the mountains, and then we swept back to Icy Straits, and started out to the open ocean."

But we will not confine ourselves to the description of one person in considering this the most fascinating and curious scene presented to the Alaskan tourists. Grand, even to the extent of being almost appalling, as are the Alaskan fjords, they are but the Yosemite or Colorado Parks, with navigable valleys, as they would appear greatly enlarged ; much as we are awe-struck at the feet of Mount St. Elias, it is but Tacoma or Shasta in grander proportions, and so on through the list of scenes we view : but in the glaciers we have no counterpart that can be viewed from a steamer's deck, unless the polar zones themselves be invaded ; and here, in fact, we view the grandest sight to be seen in that dreary zone, without any of its many dangers. Says Professor Denman, of San Francisco, who has devoted much of his attention to glaciers, and especially these of Alaska, compared with which he pronounces those to be seen in Switzerland and other parts of Europe to be "babies :"

" Muir Glacier is a spectacle whose grandeur can not be described,—a vast



SCENES AMONG THE ALASKAN GLACIERS. (From Photographs.)

No. 1 (Top). A Near View of the Terminal Front of the Muir Glacier. No. 2. Looking Seaward from the Surface of the Glacier. No 3. The Excursion Steamer at the Front of the Glacier. No. 4 (Bottom). On the Great Frozen Sea; a Near View of the Surface of the Glacier.

frozen river of ice, ever slowly moving to the sea, and piling the enormous masses higher between the mountain banks, until their summit towers hundreds of feet in the air. Where the point of the glacier pushes out into and overhangs the water, vast fragments breaking apart every few moments of their own weight, and falling with a thundering crash into the sea, to float away as enormous icebergs, it affords a spectacle which can only be understood and appreciated by one who beholds it with his own eyes. From the summit of Muir Glacier no less than twenty-nine others are to be seen in various directions, all grinding and crowding their huge masses toward the sea, a sight which must certainly be one which few other scenes can equal."

Says a writer, Mr. Edward Roberts, in the *Overland Monthly* : "I do not know how wide, nor how long, nor how deep Glacier Bay is. One does not think of figures and facts when sailing over its waters and enjoying the novel features. Flood Switzerland, and sail up some of its cañons toward Mont Blanc, and you will have there another Glacier Bay. But until the sea-waves wash the feet of that Swiss peak, and until one can sail past the glaciers of that country, there will never be found a companion bay to this of Alaska. Norway, with all its ruggedness, has nothing to equal it ; and there is not a mountain in all the ranges of the Rockies which has the majestic gracefulness of Fairweather Peak, which looks down upon the bay.

"Imagine the view we had as we turned out of Lynn Canal and moved into the ice-strewn waters of the strange place. Above hung the sun, warm and clear, and lighting up the wide waste of waters till they glistened like flashing brilliants. Away to the left and right ran sombre forests, and long stretches of yellow-colored stone, and rocky cliffs that now ran out into the bay, and, again, rose high and straight from out it. No villages were in sight; no canoes dotted the waters; but all was desolate, neglected, still; and cakes of ice, white in the distance and highly colored nearer to, floated about our ship. And there, in the northwest, rising so high above the intervening hills that all its pinnacles, all its gorges, and its deep ravines of moving ice were visible, was Fairweather, loftiest, whitest, most delicately moulded peak of all the snowy crests in this north land. From a central spur, topping all its fellows, lesser heights helped form a range which stretched for miles across the country, and on whose massive shoulders lay a mantle of such pure whiteness that the sky above was bluer still by contrast, and the forests grew doubly dark and drear. All through the afternoon we sailed toward the glorious beacon, while the air grew colder every hour, and the ice cakes, hundreds of tons in weight, grew more numerous as the daylight began to wane. The glaciers of Glacier Bay are the largest in Alaska. Formed among the highest crags of the Fairweather range, they gradually deepen and widen as they near the sea, and end, at last, in massive cliffs of solid ice, often measuring three hundred feet high, and having a width of several miles. The surface of the glaciers is rough and billowy, resembling the waves of a troubled sea frozen into solid blocks of ice at the moment of their wildest gambols. Constantly pressed forward by the

heavy blocks that gradually slide down the mountain ravines, the great frozen river keeps pressing seaward, until the action of the waves crumbles away gigantic cakes, that fall into the waters with a noise like the booming of cannon, and with a force that sends columns of water high into the air. The scene was one of arctic splendor,—white, ghostly and cheerless; while the light was that so often described by visitors to the polar sea,—uncertain, bluish, and strongly resembling a November twilight in New England, when the sky is overcast, the trees are bare, and the clouds are full of snow. Gaining at last a point barely three hundred yards from the glacier, the ship was stopped short. Before us rose the towers and solid walls, forming an embankment higher than our mast-head, and towering upward in dense masses against the leaden sky. Taken to Switzerland, the glacier of Alaska would cover that country three times over; for the frozen rivers of our largest purchase are not only fifty miles in length and three in width, but often twice that distance long and ten times that distance wide."

Lieutenant Wood, whom we have quoted before, in speaking of the T'linkit Indians in the ice, says: "I noticed that, when journeying through the floating ice in good weather, our Indians would carefully avoid striking pieces of ice, lest they should offend the Ice Spirit. But, when the Ice Spirit beset us with peril, they did not hesitate to retaliate by banging his subjects. After picking our way through the ice for three days, we came upon a small, temporary camp of Hoonahs, who were seal hunting. We found little camps of a family or two scattered along both shores. One of the largest glaciers from Fairweather comes into the bay, and thus keeps its waters filled with the largest icebergs, even in the summer season, for which reason the bay is a favorite place for seal hunting. The seal is the native's meat, drink (the oil is like melted butter) and clothing. I went seal hunting to learn the art, which requires care and patience. The hunter, whether on an ice floe or in a canoe, never moves when the seal is aroused. When the animal is asleep, or has dived, the hunter darts forward. The spear has a barbed, detachable head, fastened to the shaft by a plaited line made from sinew. The line has attached to it a marking buoy, which is merely an inflated seal's bladder. The young seals are the victims of the T'linkit boys, who kill them with bow and arrow. These seal hunters used a little moss and seal oil and some driftwood for fuel. * * * After about forty miles' travel, we came to a small village of Asónques. They received us with great hospitality, and, as our canoe had been too small to carry any shelter, the head man gave me a bed in his own cabin. He had a great many wives, who busied themselves making me comfortable. The buckskin re-enforcement of my riding trousers excited childish wonder. I drew pictures of horses and men separate, and then of men mounted on horses. Their astonishment over the wonderful animal was greater than their delight at comprehending the utility of the trousers. The Alaskan women are childish and pleasant, yet quick-witted, and capable of heartless vindictiveness. Their authority in all matters is unquestioned. No bargain is made, no expedition

set on foot, without first consulting the women. Their veto is never disregarded. I bought a silver-fox skin from Tsatate; but his wife made him return the articles of trade and recover the skin. In the same way I was perpetually being annoyed by having to undo bargains because his wife said '*clekh;*' that is, 'no.' I hired a fellow to take me about thirty miles in his canoe, when my own crew was tired. He agreed. I paid him the tobacco, and we were about to start, when his wife came to the beach and stopped him. He quietly unloaded the canoe and handed me back the tobacco. The whole people are curious in the matter of trade. I was never sure that I had done with a bargain; for they claimed and exercised the right to undo a contract at any time, provided they could return the consideration received. This is their code among themselves. For example: I met, at the mouth of the Chilkat, a native trader who had been to Fort Simpson, about six hundred miles away, and, failing to get as much as he gave in the interior of Alaska for the skins, was now returning to the interior to find the first vender, and revoke the whole transaction.

"From the Asónque village I went, with a party of mountain goat hunters, up into the Mount St. Elias Alps back of Mount Fairweather,—that is, to the northeast of that mountain. For this trip our party made elaborate preparations. We donned belted shirts made of squirrel skins, fur head-dresses (generally conical), sealskin bootees, fitting very closely, and laced half way to the knee. We carried spears for alpenstocks, bows and arrows, raw-hide ropes, and one or two old Hudson Bay rifles. Ptarmigan were seen on the lower levels where the ground was bare. The goats kept well up toward the summit, amid the snow fields, and fed on the grass which sprouted along the edges of melting drifts. The animal is like a large, white goat, with long, coarse hair and a heavy coat of silky underfleece. We found a bear that, so far as I know, is peculiar to this country. It is of a beautiful bluish under-color, with the tips of the long hairs silvery white. The traders call it 'St. Elias silver bear.' The skins are not uncommon." This little mountain trip of Lieutenant Wood's is especially spread before the attention of those who find in this form of exercise their best recreation from their regular duties.

But, however much the tourists may want to dwell amidst the curious and marvelous scenes of Glacier Bay (and so great has been this demand that it is contemplated building a summer resort near by, that passengers may remain over one steamer), yet a time must come when we will have to bid good-bye to this polar part of our wonderland, and pass on to the next grand panorama in view. Southeastward out of Glacier Bay into Icy Straits, and we turn southwestward into Cross Sound, headed for the Pacific Ocean, and for the first time enter its limitless waters. Cross Sound was named by Vancouver, in 1778, in honor of the day on which it was discovered, and is about fifty-five miles long. It corresponds on the north to the Strait of Juan de Fuca on the south, these two waterways being the limiting channels north and south of the inland passage as it connects with the Pacific Ocean. As the Puget Sound projects

much farther to the south from Fuca Strait into the mainland, hemmed in by snowy peaks, so Lynn Canal, "the Puget Sound of the North," continues the Sound of the Holy Cross far to the northward, embayed by glaciers, icebergs, and fields of snow.

Recently, a trip out of Cross Sound, and northwestward about two hundred miles along the Pacific coast, has been occasionally added to the scenes of the inland passage, the new views presented being the Mount St. Elias Alps, directly facing the Pacific, for the distance noted, and containing within those limits the greatest number of high and imposing peaks to be found in any range in the world. The inland passage (by the use of Peril Straits to Sitka) became so perfect a river-like journey, absolutely free from sea-sickness, that no one felt like breaking this delightful trip by a sea journey, in any of its parts, however tempting the display might be. A trip or two, however, soon convinced the company that the mildness of the sea during the excursion season would warrant them in taking it as a part of the journey; and since, as I have said, it is taken occasionally, I think a short description of it would be appropriate here. Should the hotel in Glacier Bay, or near vicinity, be completed soon, it would be a good stopping-point for those who are sure to feel sea-sick with the least motion of the waves; while, to all others, the chances for good weather on the Fairweather Grounds, as they are not inappropriately termed, are very good, and, conjoined with the grand mountain scenery, should not be missed. Rounding Cape Spencer (*Punta de Villaluenga* of old Spanish charts), the northern point of the Pacific entrance to Cross Sound, the journey out to sea is commenced; a view about ten to fifteen miles off shore being the best, or on what is known to the fishermen who here used to pursue the right whale, "the Fairweather Grounds," being so named, it is said, from Fairweather peak being in sight of most of it; and this, again, was named by the indomitable Cook, in 1778, as a monument to the fair weather he had cruising in sight of the grand old chain, a name which most tourists may congratulate themselves is well bestowed.

Almost as soon as Cape Spencer is doubled, the southern spurs of the Mount St. Elias Alps burst into view, Crillon and Fairweather being prominent, and the latter easily recognized from our acquaintance with it from the waters of Glacier Bay. A trip of an hour or two takes us along a comparatively uninteresting coast, as viewed from "square off our starboard beam;" but all this time the mind is fixed by the grand Alpine views we have ahead of us, that are slowly developing in plainer outline here and there as we speed toward them. Soon we are abreast of Icy Point: while, just beyond it, comes down a glacier to the ocean that gives about three miles of solid sea-wall of ice, while its source is lost in the heights covering the bases of the snowy peaks just behind. The high peak to the right, as we steam by the glacier front, is Mount La Perouse, named for one of the most daring of France's long list of explorers, and who lost his life in the interest of geographical science. His eyes rested on this range of Alpine peaks in 1786, just a century ago. Its highest point reaches well above 10,000 feet,

and its sides are furrowed with glaciers, one of which is the ice-wall before our eyes, and which is generally known as the La Perouse Glacier. The highest peak of all, and on the left of this noble range, is Mount Crillon, named by La Perouse, in 1786, after the French Minister of the Marine ; while between Crillon and La Perouse is Mount D'Agelet, the astronomer of that celebrated expedition. Crillon cleaves the air for 16,000 feet above the sea on which we rest, and can be seen for over a hundred miles to sea. It, too, is surrounded with glaciers, in all directions from its crown. Crillon and La Perouse are about seven miles apart, nearly north and south of each other. About fifteen miles northwest from Crillon is Lituya Peak, 10,000 feet high ; and the little bay opening that we pass, between the two, is the entrance to Lituya Bay, a sheet of water which La Perouse has pronounced as one of the most extraordinary in the world for grand scenery, with its glaciers and Alpine shores. Our steamer will not enter, however; for the passage is dangerous to even small boats,—one island bearing a monument to the officers and men of La Perouse's expedition, lost in the tidal wave which sweeps through the contracted passage like a breaker over a treacherous bar. Some ten or twelve miles northwest from Lituya Peak is Mount Fairweather, which bears abreast us after a little over an hour's run from Lituya Bay. It was named by Cook in 1778, and is generally considered to be a few hundred feet shorter than Mount Crillon. It is in every way, by its peculiar isolation from near ridges almost as high as itself, a much grander peak than Crillon, whose surroundings are not so good for a fine Alpine display. Fairweather, too, has its frozen rivers flowing down its sides; but none of them reach the sea, for a low, wooded country, some three or four miles in width, lies like a glacis at the seaward side of the St. Elias Alps, for a short distance along this part of the coast. The sombre, deep green forests add an impressive feature to the scene, however, lying between the dancing waves below and the white and blue glacier ice above. Rounding Cape Fairweather, the coast trends northward; and, as our bowsprit is pointed in the same direction, directly before us are seen immense glaciers reaching to the sea. From Cape Fairweather (abreast of Mount Fairweather) to Yakutat Bay (abreast of Mount Vancouver), no conspicuous peak rears its head above the grand mountain chain which for nearly a hundred miles lies between these two Alpine bastions; but nevertheless every hour reveals a new mountain of 5,000 to 8,000 feet in height, which, if placed anywhere else, would be held up with national or State pride as a grand acquisition. Here they are only dwarfed by grander peaks. The glacier which we are approaching from Cape Fairweather was named, by La Perouse, *La Grande Plateau.* It is a very low lying glacier, its grade as it fades away inland being very slight, more like a frozen river than the precipitous masses of ice which we have been used to seeing. Little is known of it, beyond the seaward aspect; but it is probably the largest glacier in Alaska, and the largest in the world, south of the polar regions themselves.

Wherever these glaciers reach the sea, or connect with it by draining

rivers,—and all large glaciers, at least, do this,—there is seen a milky sediment floating in the water, which these "mills of the gods" grind from the mountain flanks in their slow but rasping course down their sides. Wherever they find calcareous strata to abrade, the water is almost milklike in hue for miles around. The glacier of the Grand Plateau is the last one facing the Pacific itself, as we move northward; but, where little bays cut back through the flat lands at the foot of the range, they may reach the glaciers which exist everywhere on the mountain sides.

Off the Bay of Yakutat,—a name given it by the resident T'linkit tribes,—we have our best view of imperial St. Elias, the crowning peak of this noble range, and the highest mountain in all North America,—nearly 20,000 feet above the sea-level, and all of this vast height seemingly springing from the very sea itself. No good picture has ever been given of it, and no words have ever fully described it. All of the superlatives of our language have clothed so many lesser peaks that they fall flat and mentally tasteless in the presence of this Alpine Titan, rearing his crest among the clouds as if defying description. This want of words has been felt by so many who have visited the grand scenery of Alaska, who saw that, in illustrating a fjord here or a glacier there, they have but duplicated the word-painting of some other writer describing a puny antagonist, compared with their subject, that I will give it in the words of one who expresses the idea more closely than I. It is from the pen of a correspondent in the Kansas City *Journal*, under date of September 14, 1885.

"The difficult thing for the tourist to do in regard to Alaska is to describe what is seen for the general reader. Everything is on such an immense and massive scale that words are diminutives for expression, rather than—as travelers have been credited with using them—for exaggerated descriptions. For example, people cross the continent to sail for an hour or two among the Thousand Islands of the St. Lawrence, and word-painting has been exhausted in exaltation of their beauties. But here is a thousand miles of islands, ranging in size from an acre to the proportions of a State, covered with evergreen forests of tropical luxuriance, yet so arctic in their character as to be new to the eye, and in regard to which botanical nomenclature but confuses and dissatisfies. And in all this vast extent of mountain scenery, with summits ranging from one thousand to fifteen thousand feet in height, there is not enough level land visible to aggregate one prairie county in Western Missouri or Kansas. Day after day there is a continuous and unbroken chain of mountain scenery. I can not better impress the character of the landscape, as seen from a vessel's deck, than to ask the reader to imagine the parks, valleys, cañons, gorges and depressions of the Rocky Mountains to be filled with water to the base of the snowy range, and then take a sail through them from Santa Fé to the northern line of Montana. Just about what could be seen on such an imaginary voyage is actually passed through in the sail now completed by our party of enthusiastic tourists for the past ten days. You may divide the scenery into parts by the days, and just as it was successively passed through, and any one of the

subdivisions will furnish more grand combination of mountain and sea than can be seen anywhere on the globe. It is this vast profusion of scenery, this daily and hourly unrolling of the panorama, that overwhelms and confuses the observer. It is too great to be separated into details, and everything is platted on such a gigantic scale that all former experiences are dwarfed, and the imagination rejects the adjectives that have heretofore served for other scenes: to employ them here is only to mislead."

"As one gentleman, a veteran traveler, remarked to me, as we stood looking north at the entrance to Glacier Bay, with the St. Elias Alps in full view, and Mounts Crillon and Fairweather overtopping the snow-covered peaks of that remarkable range:

"'You can take just what we see here, and put it down on Switzerland, and it will hide all there is of mountain scenery in Europe.' And then he added: 'I have been all over the world; but you are now looking at a scene that has not its parallel elsewhere on the globe.'

"I cite this incident, as it is more descriptive, and gives a better idea of contrast than anything of my own could do, giving, as it does, to the reader, a conception of the vastness and immensity of the topographical aspect of the shores of the inland seas through whose labyrinthine passages we have for ten days past, and for ten days more to come will be lost to the outside world, where nature reigns undisturbed and unfretted by the hand of civilization."

Here, under the solemn influence of Mount St. Elias, and in the northernmost waters of the greatest ocean of our planet, we turn southward to repeat in inverse order the things we have seen; or perchance, as often happens, down a number of new channels, with their varied scenery, before home is reached again.

I have given a certain order in which the few ports of Alaska are visited; but the reader must not for a moment think that this is always rigidly followed. Sometimes some of them are left for the return journey, and much depends on the amount of freight, and the number and character of passengers. In the winter the trips are made wholly with reference to mails, freight, and the few passengers; but in the spring, summer, and fall these are wholly subordinate, and the trips are converted into excursions in the broadest sense of the word. While thousands of little channels remain almost wholly unexplored, which probably would make the fortune of excursion companies if transported elsewhere, yet it is evident that the greater attractions of the great inland passage have been discovered, and are now shown to the tourists to the Wonderland of the World.

FRED'K SCHWATKA.

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THRO' WONDERLAND with Lieut. Schwatka

YELLOWSTONE NATIONAL PARK
EAST BOUNDARY OF THE PARK
MONTANA
IDAHO
WYOMING
YELLOWSTONE LAKE
GALLATIN RANGE
ROCKY MOUNTAIN DIVIDE
CONTINENTAL DIVIDE
SPECIMEN RIDGE
Sulphur Hills
Electric Peak 11,126
Sepulchre Mt. 9,770
MAMMOTH HOT SPRINGS
Yellowstone Park Hotel
Mt. Evarts 7,600
Gardiner Terrace Mt. 9,000
Quadrant Mt. 10,127
Bell's Pk. 10,337
Mt. Holmes 10,578
Heads of the West Gallatin Riv.
North Fork of Madison
Sheepeater Cliffs
Beaver L.
Twin Lakes
L. of the Woods
Hibbards Pass
NORRIS GEYSER BASIN
Johnson Pk.
Monument Geyser
Mt. Schurz
FIRST CAÑON FALLS
Lookout Cliffs 1,000 ft.
LOWER GEYSER BASIN
MIDWAY GEYSER BASIN
Excelsior Spr.
Twin Buttes
FAIRY FALLS 250 FT.
UPPER GEYSER BASIN
Kepler Cascade
Sulphur Sprs.
SHOSHONE GEYSER BASIN
SHOSHONE LAKE
LEWIS L. 7,800
Madison L.
Two Ocean Pond
PROPOSED ROAD
Bluff Pt.
West Bay or Thumb
Delusion L.
Riddle L.
HEART LAKE GEYSER BASIN
Red Mtn. 9,771
Mt. Sheridan
Natural Bridge
Rock Pt.
Storm Pt.
Steamboat Pt.
Pelicans Roost
Stevenson's I'd
Frank's I'd
South Finger
South East Finger
BRIMSTONE BASIN
Mt. Doane 10,713
Mt. Stevenson 10,420
Mt. Langford 10,779
Signal Hills
Grizzly Mt.
Sylvan L.
Mt. Hoyt 10,473
Mt. Crittenden 10,190
Lake Butte
Jones Pass
Pelican Hill 9,500
Mud Springs and Geysers
Hot Sulphur Sprs.
HAYDEN VALLEY
Violet Springs
CRYSTAL FALLS
LOWER FALLS 350 FT.
UPPER FALLS 182 FT.
TWIN FALLS
CASCADE 1300 FT.
Mt. Washburn 10,340
Dunraven Pk. 8,867
Mt. Stevens 9,633
Thompsons Pk. 9,300
TOWER FALLS 132 FT.
Baronettes Bridge
Junction Butte
Garnett Hill
Amethyst Mtn. 9,423
FOSSIL FORESTS
Bison Peak 9,036
Mt. Longfellow 9,518
Soda Butte
Mt. Norris 10,019
Gamekeepers Cabin
Bison Summit 9,000
EXPLORATION ROUTE OF 1880
Hoodoo Mts.
Saddle Mtn. 11,100
Pilot Knob 10,150
Index Pk. 9,875
Stinking Water
Bald Mtn.
HOODOO CAÑON
Scale of Miles.
POOLE BROS., MAP ENGR'S, CHICAGO

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